

# United States Department of the Interior Bureau of Land Management Ridgecrest Field Office

# Alta East Wind Project BLM Land Use Application File # CACA-052537

# **SCOPING REPORT**

# **RESULTS OF SCOPING**

October 2011

Ridgecrest Field Office 300 South Richmond Road Ridgecrest, CA 93555

# **TABLE OF CONTENTS**

# Alta East Wind Project Scoping Report

1.0	OV	ERVIEW OF CEQA/NEPA SCOPING PROCESS	1
		Introduction	
		Summary of CEQA/NEPA Scoping Process	
	1.3	Agencies, Organizations, and Persons Providing Scoping Comments	3
	1.4	Scoping Report Organization	4
2.0	SUI	MMARY OF PROPOSED PROJECT	5
	2.1	Project Description	5
		Project Purpose and Need	
		Project Objectives	
		Agency Coordination	
		2.4.1 Lead Agency	8
		2.4.2 Cooperating Agency	8
3.0	SUI	MMARY OF SCOPING COMMENTS	9
		Project Description	
		Geographic scope of effects	
		Human Environment Issues	
		3.3.1 Aesthetics/Visual Resources	9
		3.3.2 Land Use	10
		3.3.3 Fire and Safety Hazards	10
		3.3.4 Noise	11
		3.3.5 Cultural and Historic Resources	11
		3.3.6 Transportation	11
		3.3.7 Solid and Hazardous Waste	12
		3.3.8 Social and Economic Conditions and Environmental Justice	12
	3.4	Natural Environment Issues	12
		3.4.1 Biological Resources	12
		3.4.2 Water Resources	13
		3.4.3 Air Quality	15
	3.5	Indirect and Cumulative Impacts	15
	3.6	Project Alternatives	15
	3.7	Issues Outside the Scope of the EIR/EIS	16
4.0	SUI	MMARY OF FUTURE STEPS IN THE PLANNING PROCESS	17
	4.1	Identification of Issues	17
	4.2	Data Information and Collection	17
	4.3	Preparing Draft EIR/EIS	17

4.3 Draft EIR/EIS and Public Comment Period	17
4.4 Response to Comments, Preparation of Final EIR/EIS,	
Notice of Determination, and Record of Decision	18
5.0 REFERENCES CITED	19
Appendices	
Appendix A. Kern County Notice of Preparation (NOP)	A-1
Appendix B. BLM Notice of Intent (NOI)	B-1
Appendix C. Scoping Meeting Materials	C-1
Appendix D. Scoping Meeting Transcript	D-1
Appendix E. Written Comments Received During Public Scoping Period	E-1

### **Abbreviations and Acronyms Used in this Report**

AFZC Application for Zone Change BLM Bureau of Land Management

Caltrans California Department of Transportation

CCR California Code of Regulations
CEQ Council on Environmental Quality
CEQA California Environmental Quality Act

EIR Environmental Impact Report EIS Environmental Impact Statement

IOU Investor Owned Utility

MDA Master Development Agreement

MW megawatt

NAHC Native American Heritage Commission NEPA National Environmental Policy Act

NOI Notice of Intent NOP Notice of Preparation

NPDES National Pollutant Discharge Elimination System

ROW right-of-way

RPS Renewables Portfolio Standard

RWQBC Regional Water Quality Control Board

SCE Southern California Edison

SR State Route

WRA Wind Resource Area WTG wind turbine generator

## 1.0 OVERVIEW OF CEQA/NEPA SCOPING PROCESS

### 1.1 Introduction

Alta Windpower Development, LLC (Applicant) has submitted an Application for Zone Change (AFZC) to Kern County (County) and an application with the Bureau of Land Management (BLM) for a right-of-way (ROW) under the Federal Land Policy and Management Act of 1976 to construct a renewable energy development that would generate up to 360 megawatts (MW) of electricity through the use of wind power on a 3,200-acre Project site located 2 miles west of the intersection of Highway 58 and Highway 14 in the Mojave Desert. The Project site is within the Tehachapi Wind Resource Area (WRA) of eastern Kern County.

The Applicant has also applied for changes in zone classifications, amendments to the Kern County General Plan, and a Conditional Use Permit to allow for the use of a temporary concrete batch plant to provide concrete and materials for turbine, substation, and building foundations during construction of the wind energy facility. The requested applications would also permit construction of wind ancillary facilities and supporting infrastructure. Permanent facilities would include up to 120 wind turbine generators (WTGs), service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, Project substations, meteorological towers, and operations & maintenance facilities.

This report documents the County's and BLM's California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) scoping process and the comments received for the proposed Project. Specifically, this report describes the scoping activities and summarizes the written and verbal comments received on the County's Notice of Preparation (NOP) and BLM's Notice of Intent (NOI) and comments received at the joint public scoping meeting held for the Project. This report serves as an information source to the County and BLM in their determination of the range of issues and alternatives to be addressed in the joint Environmental Impact Report (EIR)/Environmental Impact Statement (EIS). The County and BLM will use the comments received during the scoping period to:

- 1) Identify key issues to focus the analysis;
- 2) Identify reasonable alternatives for analysis;
- 3) Present environmental impacts of the Project and alternatives;
- 4) Identify ways to avoid or reduce environmental impacts; and
- 5) Inform the agency decision-making process.

# 1.2 Summary of CEQA/NEPA Scoping Process

The CEQA/NEPA scoping process provides government agencies, public and private organizations, and the general public the opportunity to identify environmental issues and

October 2011 1 Public Scoping Report

alternatives for consideration in the EIR/EIS. The scoping process and results are an initial step in the CEQA/NEPA process.

As required by CEQA Guidelines §15082 (14 California Code of Regulations [CCR] 15000 et seq.), the Kern County Planning and Community Development Department issued an NOP on July 15, 2011, that summarized the Alta East Wind Project and stated its intention to prepare a joint EIR/EIS, and requested comments from interested parties.

To comply with NEPA (40 Code of Federal Regulations [CFR] 1501.7), the BLM published the NOI in the Federal Register (FR) to prepare a joint EIR/EIS for the Alta East Wind Project (FR Vol. 76, No. 136, page 41817, July 15, 2011). The NOI serves as the official legal notice that a federal agency is commencing preparation of an EIS. The Federal Register serves as the U.S. Government's official noticing and reporting publication. The NOI initiates the public scoping period for the EIS, provides information about the proposed Project, and serves as an invitation for other federal agencies granted cooperating agency status to provide comments on the scope and content of the EIS. The NOP is included as Appendix A and the NOI is included as Appendix B.

The NOP/NOI was filed with the state clearing house and distributed to federal, state, regional, and local agencies and organizations; school districts; local libraries; Native American groups; and private firms and individuals. The Public notice ran in the local newspaper and was sent to the general distribution list of all those identified as property owners within a 5-mile radius of the proposed Project site. BLM issued a press release regarding the NOI on July 15, 2011. The NOI and press release were also made available to the public on BLM's website for the Alta East Wind Project at:

http://www.blm.gov/ca/st/en/fo/ridgecrest/alta\_east\_wind\_project.html

During the NOP/NOI comment period, the County and BLM held a public scoping meeting on August 4, 2011, at the Mojave Veterans Hall located at 15580 O Street in Mojave, CA. The scoping meeting provided the public and government agencies the opportunity to receive information on the CEQA/NEPA process and on the proposed Project and to provide verbal and written comments. Approximately 35 people attended the scoping meeting, including representatives from local and state agencies, organizations, and private citizens. The materials associated with the scoping meeting are contained within Appendix C and include the following:

- Appendix C-1 Meeting Agenda
- Appendix C-2 Project Map
- Appendix C-3 Kern County and BLM Joint CEQA/NEPA Process
- Appendix C-4 Sign-in sheets

A court reporter was present at the public scoping meeting to capture verbal comments. The transcript is provided in Appendix D.

The comment period for the NOP and NOI ended on August 15, 2011. In total, 14 letters were received: 11 from state and local agencies and organizations; and 3 from individuals.

These comments are incorporated into the EIR/EIS Project record and are documented and summarized in this report.

# 1.3 Agencies, Organizations, and Persons Providing Scoping Comments

State and local agencies, private and public organizations, and the general public provided written comments during the public scoping period. Written comments received during the public scoping meetings and in response to the NOP/NOI are included in Appendix E. In summary, Table 1 presents the agencies, organizations, and private citizens that provided comments during the CEQA/NEPA scoping process organized in the order they were issued.

Table 1
Comments Received During Public Scoping Period

Comments Received During Public Scoping Period					
Commenter	Date				
State and Local Agencies and Organizations					
Kern County Fire Department, Nick Dunn, Fire Chief	May 2, 2011				
Southern California Gas Company, Mel Whiteaker, Planning Associate	July 19, 2011				
Native American Heritage Commission, Dave Singleton, Program Analyst	July 29, 2011				
Kern County Roads Department, Warren D. Maxwell, Transportation Development Engineer	August 5, 2011				
Lahontan Regional Water Quality Control Board, Jan M. Zimmerman, Engineering Geologist	August 9, 2011				
California Department of Transportation, District 9, Gayle J. Rosander, IGR/CEQA Coordinator	August 11, 2011				
Kern County Engineering & Survey Services Dept. Floodplain Management Section, Aaron Leicht	August 12, 2011				
U.S. Environmental Protection Agency, Region IX, Tom Plenys	August 12, 2011				
Southern California Edison Company, Deborah Hess, Local Public Affairs Region Manager	August 15, 2011				
U.S. Fish and Wildlife Service, Carl Benz, Assistant Field Supervisor	August 16, 2011				
National Park Service, Partnerships Programs, PWR, Debbie Allen	August 17, 2011				
Individuals					
Laith Sheet	July 19, 2011				
John Myers	August 4, 2011				
Jim & Deborah Crocoll	August 12, 2011				

# 1.4 Scoping Report Organization

This report summarizes the comments and issues identified through the Project's scoping period, including the public scoping meeting. Kern County and BLM will review and consider all the written and verbal comments received in preparing the EIR/EIS for the proposed Project.

Section 2 provides a description of the Project and summary information on the Applicant's stated Project objectives.

Section 3 provides an overall summary of the comments received and issues raised during the Project's public review period, including verbal comments received during the public scoping meeting.

Section 4 provides a summary of future steps in the planning process and indicates opportunities for public participation in the environmental review process.

Section 5 includes a list of references used in preparation of this scoping report.

Following is the list of appendices that includes public scoping notices, scoping meeting materials, scoping meeting transcripts, and public comments received during the public review period.

- A. Notice of Preparation (posted July 15, 2011)
- B. Notice of Intent (published in the Federal Register on July 15, 2011)
- C. Scoping Meeting Materials
  - C-1 Meeting Agenda
  - C-2 Project Area Map
  - C-3 Kern County and BLM Joint CEQA/NEPA Process
  - C-4 Meeting Sign-in Sheets
- D. Scoping Meeting Transcript
- E. Written Comments Received During Scoping Period

## 2.0 SUMMARY OF PROPOSED PROJECT

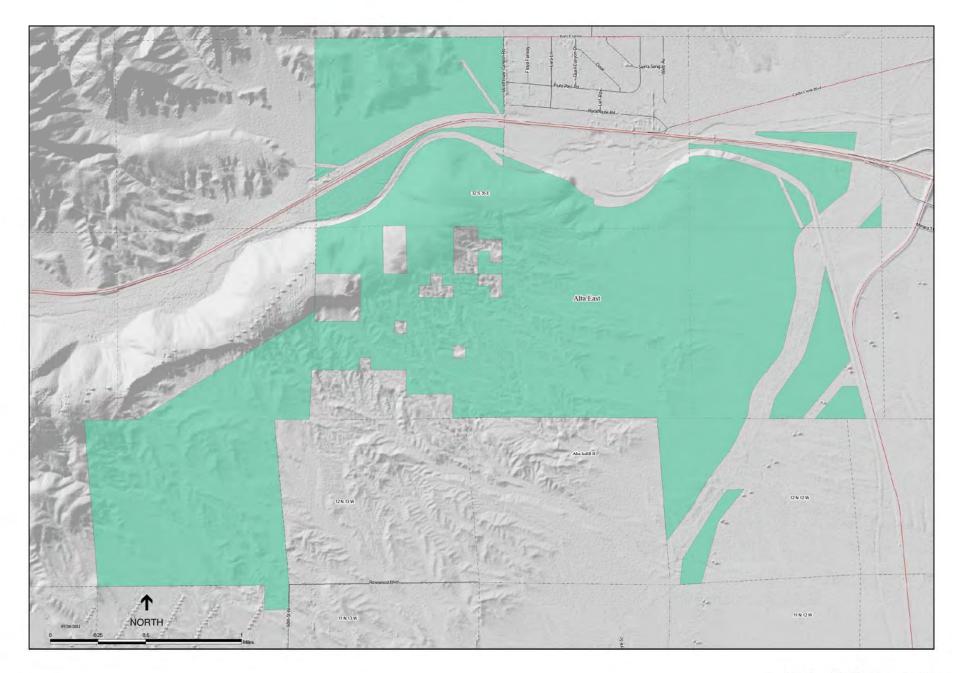
This section provides an overview of the Alta East Wind Project located in eastern Kern County, about 3 miles northwest of the unincorporated town of Mojave and 11 miles east of the City of Tehachapi.

# 2.1 Project Description

Alta Windpower Development, LLC proposes the Alta East Wind Project, a 360- MW wind energy facility of approximately 120 wind turbines, each up to 3.0 MW. The Project is proposed to be located on approximately 3,200 acres on the north and south sides of State Route (SR) 58 in southeastern Kern County, California. The Project area is approximately 3 miles northwest of the Town of Mojave and approximately 11 miles east of the City of Tehachapi. The Project site is within the Tehachapi WRA of eastern Kern County (See Figure 1, Project Boundary). In addition to wind turbines, the Project would include the following components:

- 1) An operation and maintenance facility;
- 2) One collector substation and underground and overhead electrical collection lines to collect energy from the WTGs;
- 3) From two potential route options, a single 230 kV transmission line to interconnect to the existing Southern California Edison (SCE) Windhub Substation;
- 4) Meteorological towers;
- 5) Permanent access/service roads required for construction and operations and maintenance activities; and
- 6) Temporary construction staging and laydown areas to support the WTG component staging, office trailers, a concrete batch plant, portable rock crushers, and equipment marshaling.

The Project site includes both private and federal lands. Federal lands within the Project area are under the jurisdiction of the BLM and private lands are under the jurisdiction of Kern County. Approximately 681 acres would need to be rezoned to be consistent with the Kern County Zoning Ordinance Wind Energy Combining District prior to Kern County's issuance of a Conditional Use Permit, required for Project approval.



Alta East Wind Project . 211237
Figure 1
Project Boundary

# 2.2 Project Purpose and Need

The State of California has enacted legislation to support the growth of wind power. California's Renewables Portfolio Standard (RPS) (Senate Bill 1078) is one of the most ambitious efforts in the country to integrate renewable energy into a state's energy mix. California's RPS currently requires investor-owned utilities to purchase 20 percent of their power from renewable resources, and former Governor Schwarzenegger's Executive Order S-14-08 increases this to 33 percent by 2020. The RPS complements California Assembly Bill 32, the Global Warming Solutions Act of 2006, which established a comprehensive program of regulatory and market mechanisms to reduce greenhouse gas emissions. The Alta East Wind Project would support both pieces of legislation by serving as a source of clean renewable energy, reducing the need for electricity generated from fossil fuels and offsetting greenhouse gas emissions.

In response to California clean energy legislation, SCE executed a Master Power Purchase and Wind Project Development Agreement (MDA) with the Applicant in December 2006. According to the agreement, the Applicant is to deliver up to 1,550 MW of wind energy from new projects to be developed in the Tehachapi WRA from 2010 through 2015. Power purchase agreements have been executed under the MDA for the Alta East Wind Project.

# 2.3 Project Objectives

The Applicant's fundamental objective for the Project is to construct, operate, maintain, and eventually decommission a 360-MW wind energy facility and associated interconnection transmission infrastructure, access roads, and ancillary facilities to provide renewable electric power to California's existing transmission grid to help meet federal and state renewable energy supply and greenhouse gas emissions reduction requirements. The Applicant is committed to constructing and operating the Project in an environmentally responsible manner and to providing a sustainable source of renewable energy to the state's investor-owned utilities and the public. The Applicant's specific objectives for the Project are:

- 1) To construct and operate a cost-competitive 360-MW wind energy facility to provide a renewable and reliable source of power to California's investor-owned utilities (IOUs);
- 2) To locate the Project on contiguous lands with high wind potential to maximize operational efficiency while minimizing environmental impacts and water use;
- 3) To minimize environmental impacts and land disturbance by locating the Project near existing transmission infrastructure and roads and by avoiding sensitive environmental areas, recreational resources and wildlife habitats (e.g., Desert Wildlife Management Areas, Areas of Critical Environmental Concern) to the extent practicable;
- 4) To develop a source of renewable electric power that can be placed into service in an expeditious manner by interconnecting to the existing SCE Windhub Substation; and
- 5) To assist California and its IOUs in meeting the state's RPS and greenhouse gas emissions reduction requirements, including the requirements set forth in Senate Bill 1078, Assembly Bill 32, and the Governor's Executive Order S-14-08.

# 2.4 Agency Coordination

# 2.4.1 Lead Agency

The Project site is located within Kern County, and Project approval would require a Conditional Use Permit from the County. Portions of the Project would also be located within existing BLM ROW grants. The County will act as the lead agency under CEQA and BLM will act as the lead agency under NEPA to produce a single environmental report (EIR/EIS) that will meet both agencies environmental requirements.

#### 2.4.2 Cooperating Agency

The cooperating agency role derives from NEPA, which calls on federal, state, and local governments to cooperate with the goal of achieving "productive harmony" between humans and their environment. The Council on Environmental Quality's (CEQ) regulations implementing NEPA allow federal agencies (as lead agencies) to invite tribal, state, and local governments, as well as other federal agencies, to serve as cooperating agencies in the preparation of environmental impact statements. In 2005, the BLM amended its planning regulations to ensure that it engages its governmental partners consistently and effectively through the cooperating agency relationship whenever land use plans are prepared or revised.

State agencies, local governments, tribal governments, and other federal agencies may serve as cooperating agencies. CEQ regulations recognize two criteria for cooperating agency status: jurisdiction by law and special expertise. The BLM regulations incorporate these criteria:

40 CFR §1508.5 (CEQ) Defining eligibility. "Cooperating agency" means any Federal agency other than a lead agency which has "jurisdiction by law" or "special expertise" with respect to any environmental impact....A State or local agency of similar qualifications or, when the effects are on a reservation, an Indian Tribe, may by agreement with the lead agency become a cooperating agency.

To date, no agencies have agreed to be cooperating agencies.

## 3.0 SUMMARY OF SCOPING COMMENTS

This section of the report summarizes the comments raised by the public and agencies during the scoping process. This summary is based upon both written and verbal comments that were received during the NOP/NOI public scoping period and from the Project scoping meeting held in Mojave on August 4, 2011. Table 1 provides a list of commenters including state and local agencies and organizations that provided written comments during the public review period. There were a number of environmental concerns raised during the public scoping process, which focused on the Project's potential effects in several environmental categories. The scoping report summarizes the comments received according to the following major themes:

- 1) Project Description
- 2) Geographic scope of effects
- 3) Human environment issues
- 4) Natural environment issues
- 5) Indirect and cumulative impacts
- 6) Project alternatives
- 7) EIS/EIR administrative and permitting issues.

# 3.1 Project Description

- The Southern California Gas Company commented that it does not have distribution facilities within the Project site as shown in the NOP.
- The EIR/EIS should analyze the portions of the transmission line and diverse communication routes that would be constructed within and/or connected to the Windhub Substation.
- The EIR/EIS should include a clear statement of purpose and need for the Project as well as describe the eventual decommissioning and site restoration plan.

# 3.2 Geographic scope of effects

 Several commenters express concern regarding the adequacy of the distance from the Project site used by Kern County for notifying property owners and occupants about the Project scoping process, and indicated that the Project's potential effects could affect a broader range of stakeholders.

### 3.3 Human Environment Issues

#### 3.3.1 Aesthetics/Visual Resources

• Several commenters indicated concern about the potential adverse visual and aesthetic impacts of the wind turbine towers and associated above-ground facilities.

- The Project, viewed in conjunction with other wind energy developments that have been constructed or are in progress, would place wind turbines on all four sides of some of the properties within 1,000 feet of the Project site.
- Several commenters expressed concern that the Project would adversely affect the scenic value of the Project area if it resulted in a reduction in wildlife, the viewing of which is an important aspect of the visual appeal of the region for its residents.
- Several commenters requested that the EIR/EIS address the effects that permanent Project lighting, such as potential lighting on the wind turbines to comply with the Federal Aviation Administration's Obstruction Lighting/Marking Requirements, would have on the experience of darkness of the night sky in the Project area.

#### 3.3.2 Land Use

• The EIR/EIS should discuss how the proposed action would support or conflict with the objectives of federal, state, tribal, or local land use plans, policies, and controls in the Project area.

### 3.3.3 Fire and Safety Hazards

- Several comments discussed the potential for increased risk from wildfire hazards
  due to the introduction of industrial wind turbines and related facilities into the
  Project area.
- The risk of wildfire ignition from these facilities as well as the potential for blocking emergency access and egress routes in the event of a fallen turbine or blade assembly, raised concerns.
- Concern that the turbines would be located too close to buildings and homes and stated that the method for measuring setbacks between turbines and homes from the end of the topmost blade to the base of the home did not adequately ensure the safety of residents.
- Several comments suggested larger setbacks from homes and roads.
- There would be a potential for safety hazards in the event of a shattered turbine blade or a fallen turbine component on or near a roadway.
- Concerns that the Project would emit electromagnetic waves that could have adverse human health effects.
- A loss of Joshua trees due to Project construction could result in a loss of habitat for bees and could cause bees to move closer to populated places in the Project area, resulting in an increased human health and safety risk.
- Potential mitigation measures to reduce fire and safety hazards could include increasing setbacks for turbine placement from buildings and roads, installing and

maintaining a series of water tanks throughout the Project area to aid in firefighting, and installing and maintaining access roads for emergency vehicles

#### 3.3.4 Noise

- Several commenters expressed concern regarding potential noise generated by operation and construction of the proposed wind turbines and its effect on adjacent residences.
- Several commenters requested that operational noise should be analyzed in the EIR/EIS and that noise evaluations for wind turbines should be conducted for all possible wind speeds at the Project site.

#### 3.3.5 Cultural and Historic Resources

- The Native American Heritage Council (NAHC) expressed concern about the Project's potential effects on existing cultural and historic resources in the area and noted that even if no known cultural or historic resources are found in a search of the NAHC Sacred Lands File, unknown subsurface resources could be present.
- The NAHC commented that consultation with local Native American tribes would be necessary to determine if local knowledge of Native American cultural and historic resources would identify resources in the Project area. The NAHC stressed the necessity for compliance with all applicable regulations regarding the accidental discovery of previously unknown subsurface resources, in particular, human remains, and suggests that avoidance of any cultural or historic resources discovered in the course of site preparation or construction is the appropriate mitigation. The U.S. Environmental Protection Agency requested that the EIR/EIS describe the Project's coordination with tribal governments and compliance with the National Historic Preservation Act and Executive Orders 13175 and 13007.

### 3.3.6 Transportation

- Several commenters requested that traffic impacts resulting from transporting construction equipment and materials to the Project site, including the cumulative impacts of this Project and others scheduled concurrently in the Project area, should be analyzed in EIR/EIS.
- The Kern County Roads Department expressed concern for potential damage to existing roads as a result of the Project and noted that the Applicant would be required to obtain transportation permits from the County for transporting heavy loads on County-maintained roads and encroachment permits for any construction within County road ROWs. Additionally, the Applicant should submit a Traffic Control Plan, and should be responsible for prompt repair of roads if damaged due to Project-related activities.

• The California Department of Transportation (Caltrans) requested that the EIR/EIS analyze the Project's effects on SR 58, SR 14, and discuss the Project's compliance with all applicable Caltrans regulations, permitting requirements, and road maintenance requirements.

#### 3.3.7 Solid and Hazardous Waste

 The EIR/EIS should discuss the eventual disposal of decommissioned wind turbines and associated equipment and facilities and identify hazardous wastes the Project would generate and describe plans for minimizing, storing, disposing, and managing these wastes.

#### 3.3.8 Social and Economic Conditions and Environmental Justice

- Commenters expressed concern regarding the potential impact of the Project on their property values.
- One comment asserts that several local businesses have recently closed and suggests that the Applicant's claims that the Project will have positive effects on the local economy are unfounded.
- The EIR/EIS should describe the Project's compliance with Executive Order 12898, which addresses environmental justice for minority and low-income populations as defined by the Council on Environmental Quality.

### 3.4 Natural Environment Issues

#### 3.4.1 Biological Resources

- Several commenters expressed concern regarding the Project's potential effects on biological resources such as sensitive and special status species, riparian and other sensitive natural communities, and migratory corridors for wildlife. Specifically, the California condor and golden eagle, as well as migratory birds and bats, were identified as resources of particular concern based on the Project's proposed location and equipment.
- Commenters requested that the EIR/EIS discuss the consultation and permitting process for impacts on biological resources with applicable federal and state agencies.
- Other issues raised included impacts related to invasive species and cumulative and indirect impacts on biological resources.
- A loss of Joshua trees due to Project construction could result in a loss of habitat for bees and could cause bees to move closer to populated places in the Project area.

- There is concern that the Project would emit electromagnetic waves that could have adverse effects on wildlife, including interfering with echolocation of bats and migratory patterns for birds.
- There is concern regarding communication between the public and members of the Project scoping and environmental analysis team with respect to the names and descriptions of plants in the area.

#### 3.4.2 Water Resources

- There is concern that the Project could result in a lowered water table in the Project area, affecting the accessibility of well water.
- A description of the Project's water use during construction and operation should be included in the EIR/EIS.

The Lahontan Regional Water Quality Control Board (RWQCB) submitted the following comments:

- Several water bodies are located at or near the Project site, including Oak Creek, Cottonwood Creek, Cache Creek, and numerous unnamed washes, wetlands, springs, and other surface waters. Alteration, dredging, filling, and excavating of waters of the state, which include all surface and groundwater, constitute a discharge of waste and could affect water quality in these waters. The Applicant should comply with the Water Quality Control Plan for the Lahontan Region and all other applicable water quality standards and prohibitions to protect the quality of these waters.
- The EIR/EIS should contain analysis of potential effects from the Project on water quality and hydrology, including:
  - o Project alternatives for the conceptual design for turbine pad locations, access roads, utility line alignments, and ancillary facilities. If the Preferred Alternative is different from the least damaging alternative, the EIR/EIS should discuss the rationale for the additional environmental impacts.
  - o A regional-scale map identifying all surface water resources potentially affected by the Project.
  - A list of the beneficial uses of the water bodies identified as potentially affected by the Project and an evaluation of the Project's effects on these uses. The EIR/EIS should identify Project alternatives to avoid these impacts or mitigation measures to reduce significant unavoidable impacts to a less-than-significant level. Avoidance is the preferred strategy for reducing impacts on water bodies.
  - Quantification, to the extent possible, of effects on waters of the state, based on adequate data and appropriate models. The EIR/EIS should identify whether impacts would be temporary or permanent and should specify the

- causes, natures, and magnitudes of all proposed impacts and should analyze these impacts to an extent commensurate with their size and complexity.
- O Analysis of the Project's impacts on the existing hydrograph, hydrology of upstream and downstream reaches, and cumulative impacts from existing or other planned projects in the area, and evaluation of alternatives and mitigation measures to maintain the pre-Project hydrograph.
- Analysis of the regional importance of movement corridors in and along water bodies, sensitive plant and animal species that use them, the Project's potential impacts on these corridors, and mitigation measures to enhance corridors.
- o Analysis of impacts to water bodies that could adversely affect future remediation of existing barriers to habitat connectivity.
- Due to the Project's land disturbance and industrial activities, the Applicant may be required to obtain a Section 402(p) stormwater permit under the federal Clean Water Act, including a National Pollution Discharge Elimination System (NPDES) General Construction and/or General Industrial Stormwater Permit from the State Water Resources Control Board or individual stormwater permits from the Lahontan RWQCB.
- Due to the Project's potential streambed alteration and/or discharge of waste, the Applicant may be required to obtain a Section 401 Water Quality Certification under the federal Clean Water Act and/or comply with dredge and fill waste discharge requirements, both administered by the Lahontan RWQCB.
- The Applicant should consult with the United States Army Corps of Engineers to perform jurisdictional determinations for surface waters in the Project area.
- The EIR/EIS should list the necessary permits for the Project and describe the Project-related actions requiring these permits.
- The EIR/EIS should address post-construction stormwater management, particularly any Project-related changes in stormwater runoff into natural drainages, and should analyze alternatives and/or propose mitigation measures to avoid or minimize adverse hydrologic effects from stormwater runoff.

#### The U.S. Environmental Protection Agency requested that the EIR/EIS discuss:

- the Project's water needs and sources and whether those sources are adequate and would continue to be adequate in light of the effects of climate change;
- cumulative impacts on groundwater supply;
- ways to reduce or recycle water used for the Project;
- the feasibility of using non-groundwater sources of water;

- potential effects on surface water quality and all waters of the United States;
- the Project's methods of water disposal;
- potential impacts on natural and altered drainage patterns in the Project area, including desert washes, and mitigation and/or compensation to reduce impacts;
- Clean Water Ace Section 303(d) impaired waters in the Project area and Project coordination with restoration efforts; and
- Project compliance with the Construction General Permit through a Stormwater Pollution Prevention Plan.

#### 3.4.3 Air Quality

- There are air quality concerns regarding construction exhaust and dust emissions and greenhouse gas emissions and climate change impacts.
- Commenters raised concerns regarding the Project's potential removal of vegetation that could result in erosion and adverse effects from windborne dust.

# 3.5 Indirect and Cumulative Impacts

- Concerns that the Project could contribute generally to cumulative changes to and loss of regional desert lands.
- The Kern County Roads Department requested cumulative analysis of construction-related traffic impacts.
- The Lahontan RWQCB commented that the Project could contribute to cumulative changes in and degradation of the watershed(s) in which the Project area is located. The EIR/EIS should analyze the direct, indirect, and cumulative (watershed-level) impacts of the Project on filling and excavation of waters, discharge of pollutants, hydrologic modification, aquatic function, floodwater retention, and habitat connectivity.

# 3.6 Project Alternatives

• Several commenters requested that Project alternative designs be considered in the EIS/EIR to avoid impacts on cultural and historic resources and water resources. Specifically, the Lahontan RWQCB requests that the EIR/EIS analyze alternatives to the conceptual design for turbine pad locations, access roads, utility line alignments, and ancillary facilities. It was also noted that Project alternatives may include alternative site, capacities, and technologies, and that the EIR/EIS should identify the environmentally preferred alternative.

• The U.S. Environmental Protection Agency noted its preference that renewable energy projects be sited on previously disturbed lands, which can be identified using the Renewable Energy Interactive Mapping Tool, and requested that the EIR/EIS describe its methodology for identifying and analyzing alternatives.

# 3.7 Issues Outside the Scope of the EIR/EIS

The following comments are outside the scope of the EIR/EIS analysis

- General comments were received that were against the development of the Project.
- Some comments were received requesting information.
- The Project would have an adverse effect generally on the social characteristics of residences in the Project area.

### 4.0 SUMMARY OF FUTURE STEPS IN THE PLANNING PROCESS.

The EIR/EIS process requires a team of interdisciplinary resource specialists to complete each step. An important part of the environmental planning process is engaging the public and relevant agencies from the earliest stages of and throughout the planning process to address issues, comments, and concerns. The steps of the CEQA and NEPA planning processes and agency authority and decisions to be made are described as follows. The figure included as Appendix C-3 of this report depicts a summary of the joint EIR (CEQA) and EIS (NEPA) processes.

# 4.1 Identification of Issues

Issues associated with the Project were identified through the scoping period, which initiated the planning process. The scoping process and the issues identified through the scoping process are documented in this scoping report.

### 4.2 Data Information and Collection

Much of the necessary resource data and information will be compiled from existing studies prepared for the Project or through other local agencies. Additional data and information will be obtained from available sources to update and/or supplement existing data.

# 4.3 Preparing Draft EIR/EIS

Based on collected data, including public comments, a description of the Project and alternatives (including no action) will be developed. Only alternatives that meet CEQA and NEPA screening criteria will be considered in detail. Impacts that could result from implementing the Project and alternatives will be analyzed and measures to mitigate those impacts will be identified where appropriate.

#### 4.3 Draft EIR/EIS and Public Comment Period

The next official public comment period will begin upon publication of the Draft EIR/EIS, which is anticipated to be fall of 2011. This document will evaluate a range of Project alternatives including a "No Action" alternative and a "Preferred" alternative and will generally include the following:

- 1) Executive summary
- 2) Introduction/overview (including purpose and need for the Project)
- 3) Description of Project and alternatives
- 4) Environmental analysis (including impacts and mitigation measures to minimize impacts)
- 5) Comparison of alternatives
- 6) Other CEQA/NEPA considerations.

Upon completion of the Draft EIR/EIS, the County will file a Notice of Completion with the California State Clearinghouse and BLM will publish a Notice of Availability in the Federal Register and a 45-day public comment period will follow. Copies of the Draft EIR/EIS will be distributed to elected officials, regulatory agencies, and interested members of the public. The document will also be available online at the BLM's website for the Project:

http://www.blm.gov/ca/st/en/fo/ridgecrest/alta\_east\_wind\_project.html

During this time, public comment on the Draft EIR/EIS will be received.

# 4.4 Response to Comments, Preparation of Final EIR/EIS, Notice of Determination, and Record of Decision

After the public comment period, the County and BLM will respond to comments and prepare a Final EIR/EIS. The availability of the Final EIR/EIS will be announced in the Federal Register, and a 30-day public protest period will follow. Copies of the Final EIR/EIS will be distributed to elected officials, regulatory agencies, and interested members of the public. The document will also be available online at the BLM website, as described previously.

For NEPA, following a 30-day Protest Period and concurrent 60-day Governor's Review, the BLM will resolve valid protests and prepare the Record of Decision. The Notice of Availability for the Record of Decision will be announced in the Federal Register.

# **5.0 REFERENCES CITED**

14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act.

40 CFR 1501.1-1501.8. NEPA and Agency Planning.

Federal Register, Vol. 76, No. 136, page 41817, July 15, 2011.

# **APPENDIX A**

Kern County Notice of Preparation (NOP)

# PLANNING AND COMMUNITY **DEVELOPMENT DEPARTMENT**

Lorelei H. Oviatt, AICP, Director

2700 "M" STREET, SUITE 100 BAKERSFIELD, CA 93301-2323 Phone: (661) 862-8600

FAX: (661) 862-8601 TTY Relay 1-800-735-2929 E-Mail: planning@co.kern.ca.us

Web Address: www.co.kern.ca.us/planning



# DEVELOPMENT SERVICES AGENCY

Ted James, AICP, DSA DIRECTOR

**Planning and Community Development Engineering, Surveying and Permit Services Roads Department** 

# NOTICE OF PREPARATION

**DATE:** July 15, 2011

**TO:** See Attached Mailing List FROM: Kern County Planning and Community

Development Department

Attn: Jacquelyn Kitchen, Planner III

2700 "M" Street, Suite 100 Bakersfield, CA 93301

(661) 862-8619; KitchenJ@co.kern.ca.us

### SUBJECT: NOTICE OF PREPARATION/ NOTICE OF INTENT OF A DRAFT ENVIRONMENTAL IMPACT REPORT/ ENVIORNMENTAL IMPACT STATEMENT.

The Kern County Planning and Community Development Department as Lead Agency (per CEQA Guidelines Section 15052) and the U.S. Bureau of Land Management (BLM), as the federal Lead Agency, will direct the preparation of a joint Environmental Impact Report (per CEQA Guidelines Section 15161) and an Environmental Impact Statement (EIS), referred to as an EIR/EIS, for the Alta East Wind Project proposed by Alta Windpower Development, LLC (Project Proponent). The EIR/EIS will be prepared to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

The Planning and Community Development Department solicits the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval of projects.

Due to the limits mandated by State and Federal law, your response must be received by August 15, 2011 at 5pm. In addition, comments can be submitted at a scoping meeting that will be held at the Mojave Veterans Hall for August 4, 2011 at 7:00 pm. The Mojave Veterans Hall is located at 15580 O Street in Mojave, CA.

**PROJECT TITLE:** JRK 01-11; Alta East Wind Energy Project by Alta Windpower Development, LLC. (PP11212); General Plan Amendment 2, Zone Map 168; General Plan Amendment 2, Zone Map 168-27; General Plan Amendment 3, Zone Map 179; General Plan Amendment 1, Zone Map 180; Zone Change Case 10, Map 168; Zone Change Case 4, Map 168-27; Zone Change Case 3, Map 179; Zone Change Case 6, Map 180; Zone Change Case 47, Map 197; Conditional Use Permit No. 7, Map 168.

**PROJECT LOCATION:** The project is located 2 miles west of the intersection of Highway 58 and Highway 14 in the Mojave Desert and is within the Tehachapi Wind Resource Area (TWRA) of eastern Kern County; Located within in San Bernardino Base Meridian and Township 11 North, Range 13 West, Section 3; Township 12 North, Range 13 West, Section 34, Township 12 North, Range 12 West, Section 31, Township 32 South, Range 35 East, Sections 26-28, 32-35.

**PROJECT DESCRIPTION:** The project is a renewable energy development that would generate up to 360 megawatts (MW) of electricity through the use of wind power on a 3,200-acre project site. The project proponent is requesting: (a) a change in zone classification from the E (20) (Estate 20 acres) District and the A-1 (Limited Agriculture) District to the A (Exclusive Agriculture) District, to the A WE (Exclusive Agriculture, Wind Energy Combining) District and to the A FP (Exclusive Agriculture, Floodplain Combining) District in Map 168. (b) a change in zone classification from A-1 to A and A WE in Map 180, (c) a change in zone classification from E (20) to A and A WE in Map 180, (d) a change in zone classification from A-1 to A and A WE in Map 179, (e) a change in zone classification from A-1 to A in Map 197, (f) amendments to the Kern County General Plan to eliminate section and mid-section line road reservations within Maps 168, 168-27, 179, and 180, and (g) a conditional use permit to allow for the use of a temporary concrete batch plant during construction of the wind energy facility. The requested applications would also permit construction of wind ancillary facilities and supporting infrastructure, and a concrete batch plant to provide concrete and materials for turbine, substation, and building foundations. Permanent facilities would include up to 120 wind turbine generators, service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, meteorological towers, and operations & maintenance facilities.

Signature:	/s/
Name:	Jacquelyn R. Kitchen, Planner III

Alta East Wind Project
PP11212
I:\WP\LABELS\eir01-11jk.nop.doc
jc (4/7/11)

China Lake Naval Weapons Center Tim Fox, RLA - Comm Plans & Liaison 429 E Bowen, Building 979 Mail Stop 4003 China Lake, CA 93555-6108

Federal Communications Comm 18000 Studebaker Road, #550 Cerritos, CA 90701

Eastern Kern Resource Cons Dist 1525 North Norma Street, Ste C Ridgecrest, CA 93555

So. San Joaquin Valley Arch Info Ctr California State University of Bkfd 9001 Stockdale Highway Bakersfield, CA 93311

Caltrans/ Division of Aeronautics, MS #40 P.O. Box 942873 Sacramento, CA 94273-0001

State Dept of Conservation Division of Oil & Gas 4800 Stockdale Highway, Ste 417 Bakersfield, CA 93309

Kern County Airports Department

Kern County
Env Health Services Department

City of Tehachapi 115 South Robinson Street Tehachapi, CA 93561-1722

Edwards Air Force Base AFFTC/XRX Bldg 0001, Room 110 #1 South Rosamond Blvd. Edwards AFB, CA 93524-1936

U.S. Fish & Wildlife Service 2493 Portola Road, Suite B Ventura, CA 93003

Environmental Protection Agency Region IX Office 75 Hawthorn Street San Francisco, CA 94105

Caltrans/Dist 6 Planning/Land Bank Bldg. P.O. Box 12616 Fresno, CA 93778

State Clearinghouse Office of Planning and Research P.O. Box 3044 Sacramento, CA 95812-3044 CERTIFIED MAIL

State Dept of Fish & Game 1234 East Shaw Avenue Fresno, CA 93710

Kern County Engineering, Surveying, & Permit Svs/Floodplain

Kern County Fire Dept Brian Marshall U.S. Bureau of Land Management Ridgecrest Field Office 300 South Richmond Road Ridgecrest, CA 93555

Federal Aviation Administration Western Reg Office/ Airport Div - AWP 600 P.O. Box 92007 Los Angeles, CA 90009

Tehachapi Resource Cons Dist 321 West "C" Street Tehachapi, CA 93561-2011

U.S. Dept of Agriculture/NRCS 5000 California Avenue, Ste 100 Bakersfield, CA 93309-0711

Caltrans/Dist 9 Planning Department 500 South Main Street Bishop, CA 93514

State Dept of Conservation Director's Office 801 "K" Street, MS 24-01 Sacramento, CA 95814-3528

California Regional Water Quality Control Board/Lahontan Region 14440 Civic Drive, Suite 200 Victorville, CA 92392-2306

Kern County Engineering, Surveying, & Permit Svs/Survey

Kern County Fire Dept Dave Goodell

Kern County Library/Beale Local History Room Kern County Library/Beale Diane Duquette

Kern County Parks & Recreation

Kern County Sheriff's Dept Administration

Kern County Roads Department

Kern County
Waste Management Department

Mojave Unified School Dist 3500 Douglas Mojave, CA 93501 Kern High School Dist 5801 Sundale Avenue Bakersfield, CA 93309 Kern County Superintendent of Schools Attention Mary Baker 1300 17th Street Bakersfield, CA 93301

Mojave Public Utility Dist 15844 "K" Street Mojave, CA 93501 Antelope Valley-East Kern Water Agency 6500 West Avenue N Palmdale, CA 93551

Kern County Water Agency P.O. Box 58 Bakersfield, CA 93302-0058

East Kern Air Pollution Control District Mojave Airport 1434 Flightline Mojave, CA 93501 East Kern Airport Dist Attention Stuart Witt 1434 Flightline Mojave, CA 93501

East Kern Airport Dist Engineer 3900 Ridgemoor Avenue Bakersfield, CA 93306

Northcutt and Associates 4220 Poplar Street Lake Isabella, CA 93240-9536 Adams, Broadwell, Joseph & Cardozo Attention: Janet M. Laurain 601 Gateway Boulevard, Suite 1000 South San Francisco, CA 94080

U.S. Air Force Western Regional Environmental Officer 50 Fremont Street, Suite 2450 San Francisco, CA 94105-2230

U.S. Army Dir of Public Works/Master Plan Div P.O. Box 105097 Fort Irwin, CA 92310-5097 U.S. Army Peter Rubin B790 5th Street Parks RFTA Dublin, CA 94568

U.S. Navy Steve Chung 1220 Pacific Highway, Bldg 127 San Diego, CA 92132 U.S. Marine Corps Patrick Christman Building 1164/Box 555246 Camp Pendleton, CA 92055

AT & T 5555 E. Olive Avenue, Cubicle 450F Fresno, CA 93727

Los Angeles Audubon 926 Citrus Avenue Los Angeles, CA 90036-4929 Center on Race, Poverty & the Environmental 47 Kearny Street, Suite 804 San Francisco, CA 94108-5528 Center on Race, Poverty & the Environmental/ CA Rural Legal Assistance Foundation 1302 Jefferson Street, Suite 2 Delano, CA 93215

Communities for a Better Environment 1904 Franklin Street, Suite 600 Oakland, CA 94612-2922 Defenders of Wildlife/ Cynthia Wilkerson, M.S. California Representative 1303 "J" Street, Suite 270 Sacramento, CA 95814

Desert Tortoise Preserve Committee 4067 Mission Inn Avenue Riverside, CA 92501

Mojave Chamber of Commerce P.O. Box 999 Mojave, CA 93502 Native American Heritage Council of Kern County/Fay Van Horn P.O. Box 1507 Bakersfield, CA 93302

Beth Boyst Pacific Crest Trail Program Manager 1323 Club Drive Vallejo, CA 94592

Anitra Kass Pacific Crest Trail Association P.O. Box 3398 Idyllwild, CA 92549 Brendan Taylor Pacific Crest Trail Association 645 East Ridgecrest Blvd, Apt B Ridgecrest, CA 93555

Pacific Gas & Electric Co Land Dept 1918 "H" Street Bakersfield, CA 93301

Sheppard Mullin Attn: Kendra Joy Casper 333 South Hope Street Los Angeles, CA 90071 Sierra Club/Kern Kaweah Chapter Arthur Unger Southern California Edison Planning Dept. 421 West "J" Street Tehachapi, CA 93561

Southern California Gas Co 1510 North Chester Avenue Bakersfield, CA 93308 Southern California Gas Co Transportation Dept 9400 Oakdale Avenue Chatsworth, CA 91313-6511

\*\*\*PUT IN BUCKET\*\*\*

Verizon California, Inc. Attention Engineering Department 520 South China Lake Boulevard Ridgecrest, CA 93555

David Laughing Horse Robinson P.O. Box 1547 Kernville, CA 93238 Kern Valley Indian Council Attn: Bob Robinson P.O. Box 1010 Lake Isabella, CA 93240 Kern Valley Indian Council Historic Preservation Office P.O. Box 401 Weldon, CA 93283

Terra-Gen Steve Yatsko 11512 El Camino Real, Suite 100 San Diego, CA 92130 Renewal Resources Group Holding Company Rupal Patel 5700 Wilshire Blvd, Suite 330 Los Angeles, CA 90036

Sempra Generation Marilyn Burke 101 Ash Street HQ-14A San Diego, CA 92101

Element Power Solar Dev, LLC John Gaglioti 864 Portola Drive Monterey, CA 93940 Congentrix Sunshine, LLC Rick Neff 9405 Arrowpoint Blvd Charlotte, NC 28273 Fotowatio Renewable Ventures Sean Kiernan 44 Montgomery Street, Suite 2200 San Francisco, CA 94104

Horizon Wind Energy Charlie Turlinksi 1600 Shattuck Avenue, Suite 222 Berkeley, CA 94709 Nautilus Solar Paul Steinway P.O. Box 188 Fort Lupton, CO 80621 First Solar Rick Williams 18300 Von Karman Ave, Ste 930 Irvine, CA 92612

Gary Izing enXco, Director of Land and Title 5000 Executive Parkway, Suite 140 San Ramon, CA 94583

Bill Barnes Dir of Asset Mgmt AES Wind Gen 4542 Ruffner Street, Suite 200 San Diego, CA 92111

T. Alana Steele General Counsel Western Wind Energy Corporation 3500 Glenrose Avenue Altadena, CA 91001

Michael Strickler Iberdrola Renewables, Sr Proj Mgr 1125 NW Couch St, Ste 700, 7th Fl Portland, OR 97209

Cuddy Valley Statistical 11667 Steinhoff Road Frazier Park, CA 93222

Joyce LoBasso P.O. Box 6003 Bakersfield, CA 93386

Solveig A. Thompson 29200 Woodview Court Tehachapi, CA 93561-7484

Frank Flores Northrop Grumman Corporation 1 Northrup Grumman Avenue El Segundo, CA 90245 Wind Stream, LLC Albert Davies 1275 - 4th Street, No. 107 Santa Rosa, CA 95404

Cash Long Mogul Energy 7201 Panorama Drive Bakersfield, CA 93306

PG&E Steven Ng, Manager Renewal Dev, T&D Intercon 77 Beal Street, Room 5361 San Francisco, CA 94105

Recurrent Energy Seth Israel 300 California Street, 8th Floor San Francisco, CA 92109

Eight Bar Ranch Jon and Helen Lantz 11300 Cameron Canyon Road Mojave, CA 93501

Metrostudy 5001 California Avenue, Suite 210 Bakersfield, CA 93309

URS Corporation Planning Department 3500 Porsche Drive, Suite 300 Ontario, CA 91764

Adams, Broadwell, Joseph & Cardozo Attention: Janet M. Laurain 601 Gateway Boulevard, Suite 1000 South San Francisco, CA 94080 Darren Kelly Sr. Business Manager Terra-Gen Power, LLC 565 - 5th Avenue, Floor 27 New York, NY 10017

Jeff Ciachurski, CEO Western Wind Energy Corp/ Aero Energy Box 1041 Vancouver, BC V6C 3E8

Wayne Mayes Iberdrola Renewables Dir Tech Serv 1125 NW Couch St, Ste 700, 7th Fl Portland, OR 97209

Kelly Group Kate Kelly P.O. Box 868 Winters, CA 95694

Native American Heritage Council of Kern County/Fay Van Horn P.O. Box 1507 Bakersfield, CA 93302

Northcutt and Associates 4220 Poplar Street Lake Isabella, CA 93240-9536

Vestas Sarah Adams 1881 Southwest Naito Parkway Portland, OR 97201

# **Notice of Completion & Environmental Document Transmittal**

Lead Agency: Kern County Planning Department   Contact Person: Jacquelyn R. Kitchen   Mailing Address: 2700 "M" Street Suite 100   Zip: 93301-2323   County: Kern   City/Nearest Community: Kern   City/Nearest County: Multiple   City/Nearest City/Nearest County: Multiple   City/Nearest City/Neares	Project Title:	JRK 01-11 Alta	East Wind Energy Project by	Alta Wind	Power, LLC.			
City: Bakersfield					Co	ntact Person:	Jacquely	n R. Kitchen
Project Location: County: Kern	· ·		reet Suite 100			one: (661)	862-8619	
Cross Streets: 2 miles west of the intersection of Highway 58 and Highway 14 in the Mojave Desert	City: Bakers	field		Zip: 9330	01-2323 Cor	inty: Kern		
Cross Streets: 2 miles west of the intersection of Highway 58 and Highway 14 in the Mojave Desert								
Lat. / Long.: 35° 5′ 4″ N / 118° 14′ 3″ W  Assessor's Parcel No.: Multiple  Section: Multiple  Waterways: Los Angeles Aqueduct  Waterways: Los Angeles Aqueduct  Airports: Mojave Airport  Railways: n/a  Schools: Mountain View Cont.  Document Type:  CEQA: NOP	-	· -				•	Tehachapi	
Assessor's Parcel No.: Multiple   Section: Multiple   Twp.: Multiple   Range: Multiple   Base: SBB&N Within 2 Miles: State Hwy #: SR 58 & SR 14   Waterways: Los Angeles Aqueduct   Schools: Mountain View Cont.      Document Type:   CEQA:				d Highway 1	4 in the Mojav	e Desert		Zip Code: 93501
Within 2 Miles: State Hwy #: SR 58 & SR 14	_						00	
Airports: Mojave Airport Railways: n/a Schools: Mountain View Cont.    Document Type:   CEQA:	Assessor's Par				<del></del> _		_	Iultiple Base: SBB&M
Document Type:	Within 2 Miles	s: State Hwy #:	SR 58 & SR 14					
CEQA:		Airports: N	Iojave Airport	Railways:	n/a		Schools:	Mountain View Cont.
CEQA: Solid NOP								
General Plan Update	=	NOP Early Cons Neg Dec	Supplement/Subseque (Prior SCH No.)			EA Draft EIS	Other:	Final Document
General Plan Amendment	Local Action			. — — -				
Residential:       Units       Acres	General Pl	lan Amendment lan Element	☐ Master Plan☐ Planned Unit Develop	oment [	Prezone Use Permit	on (Subdivis	sion, etc.)	Redevelopment Coastal Permit
□ Office:       Sq.ft.       Acres       Employees       □ Transportation:       Type         □ Commercial:       Sq.ft.       Acres       Employees       □ Mining:       Mineral         □ Industrial:       Sq.ft.       Acres       Employees       □ Power:       Type Wind       MW 360         □ Educational       □ Waste Treatment:       Type       MGD         □ Hazardous Waste:       Type         □ Other:       □ Other:     Project Issues Discussed in Document:    Recreational	 Development							
□ Commercial: Sq.ft.       Acres       Employees       □ Mining:       Mineral         □ Industrial: Sq.ft.       Acres       Employees       □ Power:       Type Wind       MW 360         □ Educational       □ Waste Treatment: Type       MGD         □ Hazardous Waste: Type       □ Other:         □ Other:       □ Other:         □ Aesthetic/Visual       □ Fiscal       □ Recreation/Parks       □ Vegetation         □ Agricultural Land       □ Flood Plain/Flooding       □ Schools/Universities       □ Water Quality         □ Air Quality       □ Forest Land/Fire Hazard       □ Septic Systems       □ Water Supply/Groundwater         □ Archeological/Historical       □ Geologic/Seismic       □ Sewer Capacity       □ Wetland/Riparian         □ Biological Resources       □ Minerals       □ Soil Erosion/Compaction/Grading       □ Wildlife         □ Coastal Zone       □ Noise       □ Solid Waste       □ Growth Inducing         □ Drainage/Absorption       □ Population/Housing Balance       □ Toxic/Hazardous       □ Land Use         □ Economic/Jobs       □ Public Services/Facilities       □ Traffic/Circulation       □ Cumulative Effects						s: Type _		MGD
☐ Industrial:       Sq.ft.       Acres       Employees       ☐ Power:       Type Wind       MW 360         ☐ Educational       ☐ Waste Treatment: Type       MGD         ☐ Hazardous Waste: Type       ☐ Other:         Project Issues Discussed in Document:         ☐ Aesthetic/Visual       ☐ Fiscal       ☐ Recreation/Parks       ☐ Vegetation         ☐ Agricultural Land       ☐ Flood Plain/Flooding       ☐ Schools/Universities       ☐ Water Quality         ☐ Air Quality       ☐ Forest Land/Fire Hazard       ☐ Septic Systems       ☐ Water Supply/Groundwater         ☐ Archeological/Historical       ☐ Geologic/Seismic       ☐ Sewer Capacity       ☐ Wetland/Riparian         ☐ Biological Resources       ☐ Minerals       ☐ Soil Erosion/Compaction/Grading       ☐ Wildlife         ☐ Coastal Zone       ☐ Noise       ☐ Solid Waste       ☐ Growth Inducing         ☐ Drainage/Absorption       ☐ Population/Housing Balance       ☐ Toxic/Hazardous       ☐ Land Use         ☐ Economic/Jobs       ☐ Public Services/Facilities       ☐ Traffic/Circulation       ☐ Cumulative Effects		Sq.ft.						
☐ Educational       ☐ Waste Treatment: Type       MGD         ☐ Recreational       ☐ Hazardous Waste: Type       ☐ Other:         Project Issues Discussed in Document:         ☐ Aesthetic/Visual       ☐ Fiscal       ☐ Recreation/Parks       ☐ Vegetation         ☐ Agricultural Land       ☐ Flood Plain/Flooding       ☐ Schools/Universities       ☐ Water Quality         ☐ Air Quality       ☐ Forest Land/Fire Hazard       ☐ Septic Systems       ☐ Water Supply/Groundwater         ☐ Archeological/Historical       ☐ Geologic/Seismic       ☐ Sewer Capacity       ☐ Wetland/Riparian         ☐ Biological Resources       ☐ Minerals       ☐ Soil Erosion/Compaction/Grading       ☐ Wildlife         ☐ Coastal Zone       ☐ Noise       ☐ Solid Waste       ☐ Growth Inducing         ☐ Drainage/Absorption       ☐ Population/Housing Balance       ☐ Toxic/Hazardous       ☐ Land Use         ☐ Economic/Jobs       ☐ Public Services/Facilities       ☐ Traffic/Circulation       ☐ Cumulative Effects		al: Sq.ft.						MW 360
□ Recreational       □ Hazardous Waste: Type         □ Other:       □ Other:         Project Issues Discussed in Document:         □ Aesthetic/Visual       □ Fiscal       □ Recreation/Parks       □ Vegetation         □ Agricultural Land       □ Flood Plain/Flooding       □ Schools/Universities       □ Water Quality         □ Air Quality       □ Forest Land/Fire Hazard       □ Septic Systems       □ Water Supply/Groundwater         □ Archeological/Historical       □ Geologic/Seismic       □ Sewer Capacity       □ Wetland/Riparian         □ Biological Resources       □ Minerals       □ Soild Erosion/Compaction/Grading       □ Wildlife         □ Coastal Zone       □ Noise       □ Solid Waste       □ Growth Inducing         □ Drainage/Absorption       □ Population/Housing Balance       □ Toxic/Hazardous       □ Land Use         □ Economic/Jobs       □ Public Services/Facilities       □ Traffic/Circulation       □ Cumulative Effects	=					nt: Type	iliu	MGD
Project Issues Discussed in Document:	=				Hazardous Wa	ste: Type _		
Aesthetic/Visual ☐ Fiscal ☐ Recreation/Parks ☐ Vegetation ☐ Agricultural Land ☐ Flood Plain/Flooding ☐ Schools/Universities ☐ Water Quality ☐ Forest Land/Fire Hazard ☐ Septic Systems ☐ Water Supply/Groundwater ☐ Archeological/Historical ☐ Geologic/Seismic ☐ Sewer Capacity ☐ Wetland/Riparian ☐ Coastal Zone ☐ Noise ☐ Solid Waste ☐ Growth Inducing ☐ Drainage/Absorption ☐ Population/Housing Balance ☐ Toxic/Hazardous ☐ Commic/Jobs ☐ Public Services/Facilities ☐ Traffic/Circulation ☐ Cumulative Effects					Other:			
	Project Issues	Discussed in Doc	cument:		- <b></b>			
	Aesthetic/V	√isual	Fiscal	⊠ Recre	eation/Parks		$\boxtimes$ $\vee$	/egetation
						S		
⊠ Biological Resources       ⊠ Minerals       ⊠ Soil Erosion/Compaction/Grading       ⊠ Wildlife         □ Coastal Zone       ⊠ Noise       □ Solid Waste       □ Growth Inducing         ☑ Drainage/Absorption       ☑ Population/Housing Balance       ☑ Toxic/Hazardous       ☑ Land Use         □ Economic/Jobs       ☑ Public Services/Facilities       ☑ Traffic/Circulation       ☑ Cumulative Effects			<del>_</del>					
☐ Coastal Zone       ☐ Noise       ☐ Solid Waste       ☐ Growth Inducing         ☐ Drainage/Absorption       ☐ Population/Housing Balance       ☐ Toxic/Hazardous       ☐ Land Use         ☐ Economic/Jobs       ☐ Public Services/Facilities       ☐ Traffic/Circulation       ☐ Cumulative Effects						ction/Gradir		
☑ Drainage/Absorption       ☑ Population/Housing Balance       ☑ Toxic/Hazardous       ☑ Land Use         ☑ Economic/Jobs       ☑ Public Services/Facilities       ☑ Traffic/Circulation       ☑ Cumulative Effects						Caon Gradii		
	Drainage/A	Absorption	Population/Housing Balanc	e 🔯 Toxio	c/Hazardous		$\boxtimes$ L	and Use
	Present I on	 d Use/Zaning/C	eneral Plan Designation:					
Present Land Use/Zaning/Canaral Plan Designation:		J	O .	tiol 20 ac-	as) Dosiansta	d. 1 1 (C+a+	or Fodom	al Land), 9.2 (Eutamain)
Present Land Use/Zoning/General Plan Designation:  Zoned: A-1 (Limited Agriculture) and E 20 (Estate Residential, 20 acres) Designated: 1.1 (State or Federal Land); 8.3 (Extensive 20 acre min); 8.4 (Mineral and Petroleum, Minimum 5 Acre Size); 8.5 (Resource Management, min 20 acre); 1.1/2.4 (Steep Slop	20 acre mm)	/2.4; 8.5/2.5 (Flo		$\omega_{12}\omega_{j}, \omega_{13}$	(ACSOUTCE IVI	unagement,	111111 20 ac	10), 1.1/2.7 (Sucep 310p

**Project Description:** (please use a separate page if necessary) The Kern County Planning and Community Development Department as Lead Agency (per CEQA Guidelines Section 15052) and the U.S. Bureau of Land Management (BLM), as the federal Lead Agency, will direct the preparation of a joint Environmental Impact Report (per CEQA Guidelines Section 15161) and an Environmental Impact Statement (EIS), referred to as an EIR/EIS, for the Alta East Wind Project proposed by Alta Windpower Development, LLC (Project Proponent). The EIR/EIS will be prepared to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

The project is a renewable energy development that would generate up to 360 megawatts (MW) of electricity through the use of wind power on a 3,200-acre project site. The project proponent is requesting: (a) a change in zone classification from the E (20) (Estate 20 acres) District and the A-1 (Limited Agriculture) District to the A (Exclusive Agriculture) District, to the A WE (Exclusive Agriculture, Wind Energy Combining) District and to the A FP (Exclusive Agriculture, Floodplain Combining) District in Map 168, (b) a change in zone classification from A-1 to A and A WE in Map 180, (c) a change in zone classification from E (20) to A and A WE in Map 180, (d) a change in zone classification from A-1 to A and A WE in Map 179, (e) a change in zone classification from A-1 to A in Map 197, (f) amendments to the Kern County General Plan to eliminate section and mid-section line road reservations within Maps 168, 168-27, 179, and 180, and (g) a conditional use permit to allow for the use of a temporary concrete batch plant during construction of the wind energy facility. The requested applications would also permit construction of wind ancillary facilities and supporting infrastructure, and a concrete batch plant to provide concrete and materials for turbine, substation, and building foundations. Permanent facilities would include up to 120 wind turbine generators, service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, meteorological towers, and operations & maintenance facilities.

X	Boating & Waterways, Department of California Highway Patrol		Office of Historic Preservation Office of Public School Construction
Λ	CalFire		Parks & Recreation
S	Caltrans District # 6 & 9		Pesticide Regulation, Department of
<u> </u>	Caltrans Division of Aeronautics	X	
	Caltrans Planning (Headquarters)		Regional WQCB # Lahontan_
	Central Valley Flood Protection Board		Resources Agency
	Coachella Valley Mountains Conservancy		
	Coastal Commission		San Gabriel & Lower L.A. Rivers and Mtns Conservancy
	Colorado River Board		San Joaquin River Conservancy
	Conservation, Department of		Santa Monica Mountains Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of		SWRCB: Water Quality
X	Energy Commission		SWRCB: Water Rights
S	Fish & Game Region # Fresno		Tahoe Regional Planning Agency
S	Food & Agriculture, Department of		Toxic Substances Control, Department of
	General Services, Department of		Water Resources, Department of
	Health Services, Department of		
	Housing & Community Development		Other
x	Integrated Waste Management Board		Other
S	Native American Heritage Commission		
	Public Review Period (to be filled in by lead ago	• .	Date August 15, 2011
∠ead	Agency (Complete if applicable):		
Consu	ılting Firm:	Applic	ant:
ddre	ss:	Addres	ss:
ity/S	tate/Zip:	City/St	ate/Zip:
hone	ct: :	Phone:	

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and " $\mathbf{X}$ ".

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.



# **Notice of Preparation**

Of a Joint Environmental Impact Report/Environmental Impact Statement

#### And

# **Request for Scoping Comments**

On the Preparation of an Environmental Impact Report/Environmental Impact Statement

# FOR THE Alta East Wind Project

July 15, 2011

TO: All Interested Parties

# Subject

Kern County and the U.S. Bureau of Land Management (BLM) will direct the preparation of a joint Environmental Impact Report (EIR) and an Environmental Impact Statement (EIS) referred to as an EIR/EIS for the Alta East Wind Project proposed by Alta Windpower Development, LLC (Project Proponent). Kern County, as the lead agency under California law, and the BLM, as the federal lead agency will prepare a Draft and Final EIR/EIS to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

# Summary of the Proposed Project

The proposed Alta East Wind Project would generate up to 360 megawatts (MW) of electricity through wind power. The proposed project includes up to 120 wind turbine generators, a substation, transmission interconnection to the Southern California Edison (SCE) Windhub Substation, access roads, and ancillary facilities. The proposed project area comprises 3,200 acres, 2,083 acres of which are on public land under the jurisdiction of the BLM three miles northwest of the unincorporated town of Mojave in southeastern Kern County, California. Please refer to the attached Initial Study for a more detailed description of the proposed project and maps of the proposed project area.

Because of potentially significant impacts on the environment, as identified in the attached Initial Study, Kern County and BLM will prepare a full-issue EIR/EIS. Note that this Notice of Preparation (NOP), attached Initial Study (IS), and all future project-related documents are available for review at the following location:

# **Kern County Planning and Community Development Department**

2700 M Street, Suite 100 Bakersfield, CA 93301-2370 (661) 862-8600

Hours: 8 a.m. to 5 pm. (Monday through Friday) http://www.co.kern.ca.us/planning/noticeprep.asp

### The EIR/EIS Process

The proposed project is located on land administered by Kern County and the BLM. The Project Proponent requires various authorizations and permits from Kern County and the BLM to construct and operate the proposed project. In order to consider issuance of these authorizations and permits, and based on the proposed project's potential environmental impacts, Kern County will prepare an EIR pursuant to CEQA requirements and the BLM will prepare an Draft Plan Amendment (DPA) and EIS pursuant to the requirements of the Federal Land Policy and Management Act (FLPMA) and NEPA. Based on these requirements, a joint EIR/EIS will be prepared under the direction of both agencies to satisfy the permitting and decision-making requirements of each agency prior to project approval. CEQA and NEPA also require that the EIR/EIS development process include public notice of the proposed project and address concerns that the public has identified regarding the proposed project during a process referred to as public scoping. The issuance of this NOP/IS commences the EIR scoping process pursuant to CEQA requirements. The BLM will issue a separate Notice of Intent to prepare an EIS pursuant to NEPA requirements, which will be published in the Federal Register.

The analysis of the proposed project will result in the publication of a Draft EIR/EIS and a Final EIR/EIS. A comment period of a minimum of 90 days (per BLM requirements) will be allocated for the review of the Draft EIR/EIS. A notice of availability of the Draft EIR/EIS will be sent to the State Clearinghouse by Kern County and to the Federal Register by the BLM for publication. Kern County and the BLM will consider all comments on the Draft EIR/EIS and revise the document, as necessary, before issuing a Final EIR/EIS. The Final EIR/EIS will include responses to the comments received on the Draft EIR/EIS.

# Proposed Scope of the EIR/EIS

The EIR/EIS will present the analysis of the environmental impacts of the proposed project and comparative environmental effects of the project alternatives and the No Project/No Action Alternative, and will identify mitigation measures for potentially significant impacts. The EIR/EIS will address all issue areas for which potentially significant impacts are anticipated. These issue areas are described further in the attached IS, and include:

- **Aesthetics**. Effects to visual resources from the presence of heavy construction equipment as well as operational impacts from large and highly-visible wind turbines.
- **Agricultural Resources**. Effects of conversion of agricultural land to non-agricultural use; changes to agricultural land use designations.
- Air Quality. Construction and operation emissions and effects, including the effects of on-site exhaust emissions from heavy-duty diesel and gasoline-powered construction equipment and the fugitive particulate matter from soil disturbing operations and sediment removal activities.
- **Biological Resources**. Effects on native habitat that supports special-status species; avian and bat collisions with wind turbines; degradation and fill of Waters of the State; and effects of noise and disturbance on nesting and foraging wildlife species.

- Cultural Resources. Effects of construction-related ground disturbance on recorded cultural resources sites and unknown sites that may exist in the project area.
- Cumulative Impacts. Contribution of the project to cumulative impacts to all environmental disciplines.
- Geology and Soils. Direct and indirect soils-and geologic-related impacts resulting from the proposed project; geological hazards; and erosion due to ground-disturbing activities.
- Greenhouse Gas Emissions. Effects of greenhouse gas emissions from use of conventional construction equipment and vehicles during construction and potential emission offsets from renewable energy generation.
- Hazards and Hazardous Materials. Effects of construction activities on the mobilization of potentially contaminated soil; migration of contaminants via surface water runoff; and displacement of contaminants; soil contamination from equipment leaks or spills during construction; and effects of disposal activities.
- Hydrology and Water Quality. Impacts from erosion and sedimentation; hydrological impacts; stormwater runoff.
- Land Use and Public Recreation. Construction and operational effects on adjacent land uses and recreational resources; access disruptions; consistency with the Kern County General Plan.
- Mineral Resources. Effects from preclusion of access for extraction of valuable or locally-important mineral resources if present within the project area.
- **Noise**. Effects of construction and operation activities on sensitive receptors, such as rural residences and recreational uses.
- **Population and Housing.** Effects of population growth, potential displacement of existing housing, and increased demand for construction of additional housing.
- **Public Services**. Effects on fire and police protection, parks, schools, or other public facilities due to any population increases during construction and/or operation.
- Socioeconomics and Environmental Justice. Impacts on the population (including potential disproportionate impacts to low-income and minority populations), employment, and housing communities in the study area caused by non-local project workers; and any potential impact from project-induced population growth.
- **Transportation and Traffic**. Effects of heavy-duty truck traffic from construction activities on travel and traffic lanes, driveways, access points, and service vehicles.
- Utilities and Service Systems. Effects on demand for public services and utilities from construction and sediment removal activities; and potential for conflicts with collocated utilities.

# **Project Scoping Process and Scoping Meeting**

The EIR/EIS for the Alta East Wind Project will focus on significant environmental effects. The process of determining the focus and content of the EIR/EIS is known as scoping under both CEQA and NEPA. Scoping helps to identify the range of actions, alternatives, environmental effects, and mitigation measures to be analyzed in depth, and eliminates from detailed study those issues that are not pertinent to the final decision on the proposed project. Scoping is also an effective way to bring together and address the concerns of the public, affected agencies, and other interested parties. Significant issues may be identified through public and agency comments.

Scoping, however, is not conducted to resolve differences concerning the merits of the project or to anticipate the ultimate decision on the proposal. Rather, the purpose of scoping is to help ensure that a comprehensive and focused EIR/EIS will be prepared that provides a firm basis for the decision-making process. Members of the public, affected federal, State, and local agencies, interest groups, and other interested parties may participate in the scoping process for this project by providing written and verbal comments or recommendations concerning the issues to be analyzed in the EIR/EIS. Comments can be given verbally by attending the scheduled scoping meeting. For the date, time, and location of the EIR/EIS scoping meeting, please see the cover letter to this NOP/IS packet or visit the Kern County project website at: http://www.co.kern.ca.us/planning/noticeprep.asp.

Written comments must be sent by no later than August 15, 2011 to:

Mr. Jeff Childers
Planning & Environmental Coordinator
CDDO - RECO
Bureau of Land Management
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

and

Ms. Jacquelyn Kitchen
Planner III
Kern County Planning and
Community Development Department
2700 M Street
Bakersfield, CA 93301

By Electronic Mail: E-mail communications are welcome; however, please remember to include your name and return address in the email message. E-mail messages should be sent to AltaEast@BLM.gov and KitchenJ@co.kern.ca.us.

# **Agency Comments**

This NOP has been sent to State responsible and trustee agencies, cooperating federal agencies, the State Clearinghouse, and the Federal Register. We need to know the views of your agency regarding the scope and content of the environmental information to be included in the EIR/EIS, which reflects your agency's statutory responsibilities in connection with the proposed project. Once again, responses should identify the issues to be considered in the Draft EIR/EIS, including significant environmental issues, alternatives, mitigation measures, and whether the responding agency will be a responsible State or cooperating federal agency or a State trustee agency. Due to the time limits mandated by State and federal Laws, your response must be sent at the earliest possible date but no later than 30 days (August 15, 2011) after receipt of this notice.

## INITIAL STUDY/NOTICE OF PREPARATION

Alta East Wind Project by Alta Windpower Development, LLC

General Plan Amendment 2, Map 168; General Plan Amendment 2, Map 168-27; General Plan Amendment 3, Map 179; General Plan Amendment 1, Map 180; Zone Change Case 10, Map 168 Zone Change Case 4, Map 168-27 Zone Change Case 3, Map 179 Zone Change Case 6, Map 180 Zone Change Case 47, Map 197 Conditional Use Permit No. 7, Map 168

(PP11212)

#### **LEAD AGENCY:**



Kern County Planning and Community Development Department 2700 M Street, Suite 100 Bakersfield, CA93301-2370

> Contact: Ms. Jacquelyn Kitchen (661) 862-8619 Kitchenj@co.kern.ca.us



# TABLE OF CONTENTS

Project Description			
1.1	Project Location	1	
1.2	Environmental Setting	1	
1.3	Project Description	4	
1.4	Project Facilities and Operations	5	
1.5	Project Objectives		
1.6	Proposed Discretionary Actions/Required Approvals	14	
Envir	ronmental Determination		
2.1	Environmental Factors Potentially Affected	20	
2.2	Determination	20	
Evalu	uation of Environmental Impacts		
3.1	Aesthetics	22	
3.2	Agriculture and Forest Resources	24	
3.3	Air Quality	26	
3.4	Biological Resources	28	
3.5	Cultural Resources	30	
3.6	Geology and Soils	31	
3.7	Greenhouse Gas Emissions	33	
3.8	Hazards and Hazardous Materials		
3.9	Hydrology and Water Quality	37	
3.10	Land Use and Planning	40	
3.11	Mineral Resources	41	
3.12	Noise	42	
3.13	Population and Housing		
3.14	Public Services		
3.15	Recreation	47	
3.16	Transportation/Traffic	48	
3.17	Utilities and Service Systems	51	
3.18	Mandatory Findings of Significance	53	
	LIST OF FIGURES		
Figure	e 1. Vicinity Map	2	
	e 2. Project Layout		
	re 3. General Plan		
	re 4. Existing Zoning		
	re 5. Proposed Zoning		
	re 6. Transmission Line Options		



## 1.1 PROJECT LOCATION

The project site is located on land that is subject to the jurisdiction of Kern County and to the U.S. Bureau of Land Management (BLM); therefore, Kern County and the BLM will direct the preparation of a joint Environmental Impact Report (EIR) and an Environmental Impact Statement (EIS) referred to as an EIR/EIS for the Alta East Wind Project proposed by Alta Windpower Development, LLC (Project Proponent). Kern County, as the Lead Agency under California law, and the BLM, as the federal Lead Agency, will prepare a draft and final EIR/EIS to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

The Alta East Wind Project is located 2 miles west of the intersection of Highway 58 and Highway 14 in the Mojave Desert and is within the Tehachapi Wind Resource Area (WRA) of eastern Kern County (Figures 1 and 2). The project area comprises approximately 3,200 acres; 2,083 of which are on federal land under the jurisdiction of the BLM, and 1,117 acres of which are on private land under the jurisdiction of Kern County. The private land is under lease or ownership of Alta Windpower Development, LLC, the applicant, or the current owners have authorized the applicant to include their land within the project boundaries. The project is generally located at the base of the Tehachapi Mountains in the Western Mojave Desert. Elevations in the area range between 3,000 and 3,400 feet above mean sea level.

The nearest populated areas to the project site are the unincorporated town of Mojave, which is located 3 miles southeast, and the City of Tehachapi which is located 11 miles to the west (Figure 1). Primary operational access for the project would be gained from Highway 58 and additional access locations are currently being negotiated by the applicant.

The 2,083-acre portion of the site that is on BLM land is included in an existing BLM right-of-way (ROW) Type 3 Grant Application (CACA-052537) that is held by Alta Windpower Development, LLC (AWD or Applicant) or by a subsidiary of AWD's parent company, Terra-Gen Power.

The project is located entirely within the U.S. Geological Service 7.5 minute series, Mojave topographic quadrangle. The project is located in San Bernardino Base Meridian and Township 11 North, Range 13 West, Section 3; Township 12 North, Range 13 West, Section 34, Township 12 North, Range 12 West, Section 31, Township 32 South, Range 35 East, Sections 26-28, 32-35 of the 1973 Mojave, California 7.5' and the 1995 Monolith, California 7.5' U.S. Geologic Survey (USGS) quadrangle maps.

#### 1.2 ENVIRONMENTAL SETTING

The project vicinity is generally characterized as a sparsely developed, rural area located on the eastern flank of the Tehachapi Mountains. Land uses in and around the project area consist of open space with scattered residences, off-highway vehicle use, and livestock grazing. The nearest populated area is located immediately northeast of the project area, in the outskirts of the unincorporated town of Mojave. Existing developments on the site include rights-of-way (ROWs) for underground pipelines, underground portions of the Los Angeles Aqueduct, Southern California Edison (SCE) power lines, Union Pacific Railroad (UPRR) railroad siding, which is a short stretch of railroad track used to store rolling stock or enable trains on the same line to pass, and a Los Angeles Department of Water and Power (LADWP) electric transmission line easement. The Cameron Ridge segment of the Pacific Crest Trail passes within one mile of the northwestern portion of the project area, north of State Route 58.

The project area encompasses land under the jurisdiction of the BLM or Kern County. BLM lands within the project area are classified as Multiple-Use Class L (Limited Use) pursuant to the California Desert Conservation Area (CDCA) Plan. Additionally, BLM lands in the project area are located within the Middle Knob Motorized Access Zone, as identified in the West Mojave Plan (WMP) amendment to the CDCA Plan. The project area is not within any Desert Wildlife Management Areas or Areas of Critical Environmental Concern (ACEC) established by the WMP or U.S. Fish and Wildlife Service-designated critical habitat. The project area is within the boundaries of the Kern County General Plan (KCGP),



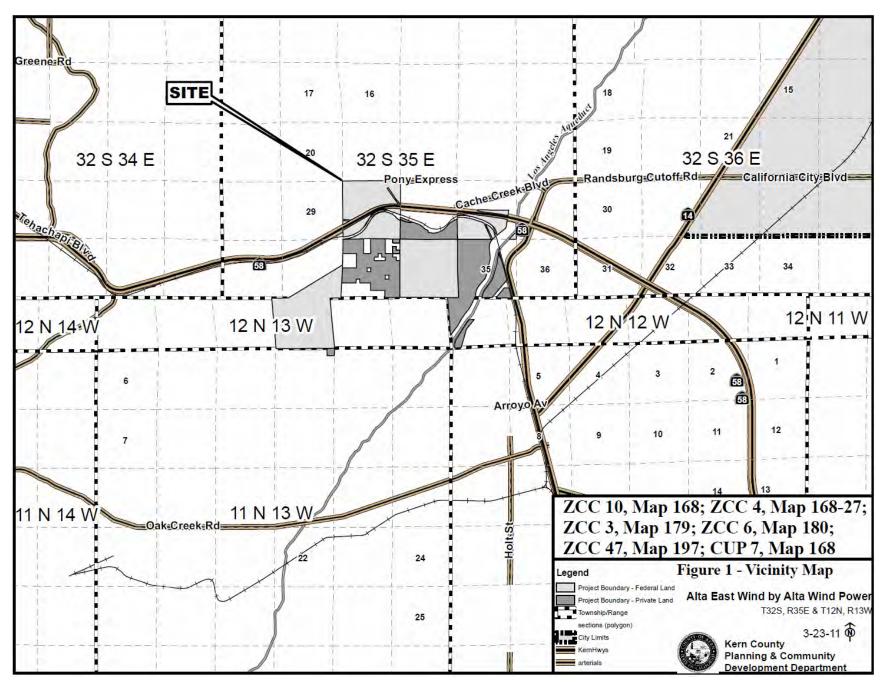




Table 1, *Project Site and Surrounding Land Uses*, shows the zoning and general plan designations for the project site and for the surrounding properties. The table references the Kern County General Plan (KCGP) and the Mojave Specific Plan (MSP).

Table 1. Pro	ject Site and Su	urrounding Land Uses	
Location	Existing Land Use	Existing Map Code Designations	Existing Zoning Classification
Project Site	Vacant Land	KCGP & MSP: 1.1 (State or Federal Lands); 8.3 (Extensive Ag, 20 acre min); 8.4 (Mineral & Petroleum, min 5 acre); 8.5 (Resource Management, min 20 acre); 1.1/2.4 (Steep Slope); 8.4 /2.4; 8.5 /2.4; 8.5/2.5 (Flood Hazard)	<ul> <li>A-1 (Limited Agriculture);</li> <li>E (20) (Estate, 20 acre)</li> </ul>
North	Vacant Land, Scattered Residential, Small Commercial Area (Gas Station)	KCGP & MSP: 1.1; 8.5; 8.5/2.1 (Seismic Hazard); 8.5/2.4; 8.5/2.5 Cache Creek Interim Rural Community Plan: 5.5 (Min. 1 Acre/Dwelling Unit); 5.6 (Min. 2.5 Acres/Dwelling Unit); 5.8 (Min. 20 Acres/Dwelling Unit); 6.3 (Highway Commercial); 7.2 (Service Industrial)	<ul> <li>A (Exclusive Agriculture)</li> <li>A-1;</li> <li>A-1 FPS (A-1 with Floodplain Secondary);</li> <li>E (1) (Estate, 1 acre)</li> <li>E (2.5) (Estate, 2.5 acre)</li> <li>E (2.5) MH (E 2.5 with Mobilehome Combining)</li> <li>C-2 (General Commercial)</li> <li>M-2 PD (Medium Industrial, with Precise Development Combining)</li> </ul>
South	Wind Farms, Vacant Land, Scattered Residential	KCGP & MSP: 1.1; 3.3 (Other Facilities); 5.7 (Min 5 Acres/Dwelling Unit)/2.4; 8.3; 8.3/2.4; 8.4/2.4; 8.5, 8.5/2.1 (Seismic Hazard); 8.5/2.4; 8.5/2.5	<ul><li>A WE (A with Wind Energy Combining)</li><li>A-1</li><li>E (20)</li></ul>
East	Vacant Land, Scattered Residential	<i>MSP:</i> 1.1; 3.3; 8.5, 8.5/2.4; 8.5/2.5	<ul> <li>A-1</li> <li>A-1 H (A-1 with Airport Approach Height Combining)</li> <li>PL H (Platted Lands)</li> </ul>
West	Wind Farms, Vacant Land, Scattered Residential	KCGP: 1.1; 8.5; 8.5/2.1; 8.5/2.4; 8.5/2.5	• A WE • A-1 • E (20)

The Alta East Wind Project site has not been designated by the California Department of Conservation (CDC) as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. The project area comprises two CDC land-use designations: Grazing Land; and Non-agriculture and Natural Vegetation. The project is not located on lands that are under a Williamson Act contract.

The project is located near several public, private, and military airport facilities; however, the turbine layout would not be within the boundaries of the Kern County Airport Land Use Compatibility Plan (ALUCP). The southeastern portion of the project is 2.5 miles away from the Mojave Air and Space Port, and is subject to Airport Influence Area "C" according to the ALUCP. The California City Municipal Airport is located 10 miles east of the project site. The project is within the Mojave Air Basin and the Antelope Valley Groundwater Basin.

### **Surrounding Land Uses**

The project is proposed to be located on 3,200 acres on the north and south sides of State Route (SR) 58 in southeastern Kern County, California, within an area of existing wind development. There are several



existing, permitted, and proposed wind energy and transmission projects proximate to the project, including the Alta-Oak Creek Mojave Wind Project, the 300-megawatt (MW) and 151-MW Pacific Wind Projects, the Catalina Renewable Energy Project, the Rising Tree Wind Project, and SCE's Tehachapi Renewable Transmission Line Project (TRTP).

#### 1.3 PROJECT DESCRIPTION

The Alta East Wind Project would generate up to 360 MW of electricity through wind power. The project includes up to 120 wind turbine generators (WTGs or turbines), a substation, transmission interconnection, access roads, and ancillary facilities. As described above, the project area comprises 3,200 acres; however, the total wind energy development area (on both Private and BLM land) is anticipated to cover approximately 2,430 acres onsite, and only a portion of wind energy development area would be temporarily or permanently disturbed. Two proposed wind turbine layouts (Figure 2) and two transmission line options (Figure 6) have been identified by the applicant.

Table 2. Project Statistics							
Total Project Boundary	Private Land	BLM Land	Proposed WE Zoning	Total Wind Development	Max No. of WTGs	Max. MWs	
3,200 acres	1,117 acres	2,083 acres	680 acres	2,431 acres	120 WTGs	360 MW	

Specifically, the project applicant is requesting: (a) a change in zone classification from the E (20) (Estate 20 acres) District and the A-1 (Limited Agriculture) District to the A (Exclusive Agriculture) District, to the A WE (Exclusive Agriculture, Wind Energy Combining) District and to the A FP (Exclusive Agriculture, Floodplain Combining) District in Map 168, (b) a change in zone classification from A-1 to A and A WE in Map 180, (c) a change in zone classification from E (20) to A and A WE in Map 180, (d) a change in zone classification from A-1 to A and A WE in Map 179, (e) a change in zone classification from A-1 to A in Map 197, (f) amendments to the Kern County General Plan to eliminate section and midsection line road reservations within Maps 168, 168-27, 179, and 180, and (g) a conditional use permit to allow a temporary concrete batch plant during construction of the wind energy facility. The requested applications would also permit the construction of wind ancillary facilities and supporting infrastructure, as well as a concrete batch plant that is necessary to provide concrete and materials for turbine, substation, and building foundations.

Figure 5 displays the areas proposed for rezoning to the A, A WE and A FP districts.

The purpose of the WE Combining District is to promote the use of an alternative to fossil fuel-generated electrical power in areas of the County that are identified to have suitable wind resources for production of commercial quantities of wind-generated electrical power. The WE Combining District contains specific development standards that apply to the associated construction and siting of WTGs and accessory facilities in the WE Combining District.

Inclusion of the Flood Plain (FP) Combining District is necessary for the portions of the project site located within the boundaries of a Zone A flood hazard area. The purpose of the FP Combining District is to protect public health and safety, and minimize property damage by designating areas that are potentially subject to flooding and by establishing reasonable restrictions on land use in such areas. The FP Combining District shall be applied to those areas lying within Zone A on the FEMA Flood Insurance Rate Maps (FIRM) or those areas potentially subject to flooding as designated by the Kern County Engineering, Surveying and Permit Services Department, pending future reclassification of such areas into the Floodplain Primary (FPP) District or the Floodplain Secondary (FPS) Combining District. The regulation established by the FP Combining District shall be in addition to the regulations of the base district with which the FP Combining District is combined.



The project would be supported by a 230-kV overhead transmission corridor that would be up to 15 miles in length. The transmission line would generally be aligned from the northeast to the southwest where it ultimately would be connected to the existing SCE Windhub Substation. The project would include the construction of one substation facility on-site, which would collect the power generated and step-up voltage from the 34.5 kV collector system to 230 kV for transmission to the Windhub Substation.

Water would be provided to the project via a new on-site well or other water service (to serve the non-potable demands). The Operations and Maintenance (O&M) facility would utilize a septic system for sewage treatment. The O&M facility would also include approved hazardous waste containment for turbine oils and fuels, as required. Any water that is needed for construction (such as water for dust suppression) would be trucked in from nearby municipalities, such as those serving Mojave or Tehachapi, or be supplied by the new on-site well.

The project proponent executed two project-specific power purchase agreements for the Alta East Wind Project under their Master Power Purchase and Wind Project Development Agreement with Southern California Edison (SCE) for a total of 300 MW on April 30, 2010. Additionally, draft Large Generator Interconnection Agreements (LGIA) for interconnecting into Windhub Substation have been issued and are in the process of finalization. In addition, the project proponent submitted an "Application for Transportation and Utility Systems and Facilities on Federal Lands" (Standard Form 299) to BLM to address a ROW Grant on federal land as well as a project-specific CDCA (California Desert Conservation Area) Plan Amendment.

The Alta East Wind Project is assumed to have a lifespan of 30 years, based on landowner lease arrangements and permit approval timeframes. Decommissioning of the Project would require removal of the wind turbines, cables, and other infrastructure support facilities and land restoration in accordance with local, State, and federal regulations and/or landowners' contractual commitments. Repowering the project would require new environmental and permit/entitlement reviews and new landowner agreements to extend the project's operational period beyond 30 years.

#### 1.4 PROJECT FACILITIES AND OPERATIONS

# 1.4.1 Project Components Overview

The project includes various components related to the generation and transmission of renewable energy. These are listed below and described in the following subsections.

- Up to 120 wind turbines not to exceed 500 feet in height with associated towers, foundations, and pad
  mounted transformers (each turbine up to 3 MW) for a total generation capacity up to 360 MW of
  electricity;
- Temporary construction staging and laydown areas to support the WTG component staging, office trailers, a concrete batch plant, portable rock crushers and equipment marshaling;
- Permanent access/service roads required for construction and operations and maintenance activities;
- One collector substation and underground and overhead electrical collection lines to collect energy from the WTGs;
- Operations and Maintenance (O&M) facility;
- Meteorological towers;
- From two potential route options, a single 230 kV transmission line to interconnect to the SCE Windhub Substation.



#### **Wind Turbine Generators**

The proposed turbines are utility-scale Vestas V90 or equivalent, capable of generating up to 3 MW of electricity each. Up to 120 WTGs would be arranged in rows in accordance with industry siting recommendations for optimum energy production and minimal land disturbance. Typically, WTGs are spaced 1.2 to 2.0 rotor diameters apart within rows and the rows are spaces 8 to 10 rotor diameters apart. Refer to Figure 2 for an illustration of the proposed WTG configuration options. The WTGs would be a horizontal-axis design, light gray color and non-reflective finish, which is consistent with the design requirements of the Kern County design guidelines specified in the WE Combining District. A WTG is composed of a tower, nacelle, hub, blades/rotor, controller, central Supervisory Control and Data Acquisition (SCADA) system for communication, transformer, braking system, safety lighting, and lightning protection system.

The total height of the WTG at the highest point of the rotor blade rotation would be 125 meters (410 feet). The ground clearance for the rotor blades at their lowest point of rotation is 35 meters (115 feet). The turbines are designed to withstand wind speeds in excess of 120 miles per hour, which exceeds recorded and projected maximum wind speeds at the project site.

**Tower.** The tower portion of the WTG consists of a tubular steel monopole that extends from the top of its concrete foundation at ground level to its connection with the nacelle. The tower supports the nacelle, hub, and three-bladed rotor and has internal access ladders for turbine maintenance. The total height of the tower to the hub of the rotor blades would be 80 meters (262 feet) tall on a 3-meter (10-foot) diameter base.

*Nacelle*. The nacelle is an aerodynamic welded steel and fiberglass structure atop the tower that contains the inner mechanical workings of the turbine, including the power-generating components. Power-generating components mounted within the nacelle would include main drive shaft/generator and the gearbox, electrical components/cabinets, and depending on the confirmed turbine size and make, the power transformer, which steps up the turbine voltage to the voltage level of the internal wind farm electrical distribution network. The nacelle also contains the blade pitch control (a system that controls the angle of the blades), a cooling system, and the yaw drive, which controls the position of the turbine relative to the wind.

*Hub*. The hub is the fixture for attaching the blades to the main drive shaft and is usually made from a large iron or steel casting. It would be located on the front of the nacelle and covered by a composite nose-cone structure to streamline the airflow and protect the equipment. The hub also contains the mechanisms that allow the blades to pitch in response to wind, temperature, and air density conditions.

**Blades/Rotor.** The WTGs would have three blades bolted to the hub; the blades and hub are collectively called the rotor. The proposed rotors are 90 meters (295 feet) in diameter. The blades are long, tapered, small-chord airfoils that resemble airplane wings and vary in thickness (thinnest at the tip and thickest where they attach to the hub) and use aerodynamic lift, similar to an airplane wing, to provide the driving force that spins the rotor. Each rotor would be equipped with a braking system to prevent rotors from dislocating from the turbine.

Controller/Communications. The controller is a microprocessor that automatically regulates operation of the WTG, including startup, shutdown, pitch control, yaw control, and safety monitoring. Information is communicated from the controller to the central O&M facility via fiber-optic cables or other means of communication such as radio-links. A central SCADA system will monitor data input from the controller to facilitate centralized operation and maintenance. If a control parameter deviates from its normal operating range, the controller would automatically shut down the WTG and notify the operating technician(s) of the fault. In many situations, the controller would analyze the data and restart the WTG if the fault were corrected or the operating conditions returned to normal. If the fault reoccurred, the controller might require a manual start.

# KERN COUNTY PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT ALTA EAST WIND PROJECT



**Transformer**. A step-up transformer would be either contained within the WTG unit or pad-mounted next to the WTG base. Transformers function to boost the voltage of the WTG (500 to 1,000 volts) to the collector system voltage of 34.5 kilovolts (kV) because the low voltage power generated by the WTG is not suitable for power transmission. Electricity from the transformer would be transmitted via underground collection system electrical cables to the project substation.

Safety Lighting. Safety lighting would be installed on the exterior of some of the nacelles in compliance with FAA rules. Specific requirements for the project would be developed in conjunction with the FAA based on the turbine heights and site-specific aviation conditions. On recent wind projects, white flashing lights were used during the daytime and red flashing lights were used at night to warn aviators away from the area; however, FAA rules have recently been revised and daytime lighting is no longer required. Lights are not required on every wind turbine; instead, they may be spaced every 1,000 feet and at the ends of turbine strings. Lighting on WTGs would be consistent with all FAA requirements.

*Lightning Protection*. For protection from potential lightning strikes, a lightning protection system would be installed on each WTG and connected to an underground grounding arrangement to facilitate lightning flowing safely to the ground. In addition, all equipment, cables, and structures comprising the wind turbines would be connected to a metallic project-wide grounding network.

#### Wind Turbine Foundations and Pad Areas

Each proposed WTG would be supported by a steel-reinforced concrete foundation. The project could include several proposed WTG foundation types depending on geotechnical constraints, wind pattern, and other factors onsite:

- Patrick and Henderson Inc. (P&H) foundation. This patented foundation type would be drilled or dug to approximately 15 to 35 feet deep, depending on geotechnical conditions and loadings, and would be approximately 18 feet in diameter. The foundation would be in the configuration of an annulus—two concentric steel cylinders. The central core of the smaller, inner cylinder would be filled with soil removed during excavation. In the cavity between the rings, bolts would be used to anchor the tower to the foundation, and the cavity would be filled with concrete. Bolting the tower to the foundation would provide post-tensioning to the concrete.
- **Rock anchor.** For each foundation, six to 20 holes, depending on geotechnical data, would be drilled approximately 35 feet into the bedrock, and steel anchors would be epoxy-grouted in place. A reinforced concrete cap containing the anchor bolts would be poured on the top of the steel anchors to support the tower structure.
- **Spread-footing.** This foundation would be square or octagonal and formed with reinforcing steel and concrete. Depending on geotechnical data, this type of foundation may be as large as 35 by 35 feet and 6 to 10 feet thick.

Total combined cut and fill volumes for the WTG foundations would be determined after site-specific geotechnical investigation. For all designs, the exposed concrete pad would be approximately 18 feet in diameter and extend less than 1 foot above grade.

# **Meteorological Towers**

Meteorological towers were previously installed on the project site to measure and collect data necessary to properly assess project viability and determine optimum turbine layout. These towers support anemometers, wind direction sensors, and temperature and relative humidity gauges at the same height of the WTG rotor hubs to monitor wind and other climate data needed to support operations and help meet reporting obligations. Some of the larger towers already installed would remain as permanent towers and some additional permanent towers would be installed.



#### **Power Collection and Transmission**

Project electricity would be collected from each WTG through its associated transformer and transferred to a substation at the project site via the electrical collection system. The proposed 230/34.5-kV project substation will be constructed within the project site to minimize power losses in the collection system and would consist of the following components: (1) a control house, (2) electrical breakers, (3) one or more 230/34.5-kV transformers, (4) an overhead electrical bus connecting the various electrical apparatus, and (5) pole structures to support electrical conductors entering the substation. The actual capacity of the project substation would depend on the total number of WTGs that supply it power. The substation site would be graded to provide for stormwater drainage. A grounding grid would be installed to protect the substations against lightning and shorts. The substation would be built to Kern County building code requirements, and the site would be graveled and enclosed within a security fence.

At least one switchyard would be required for the project, which will collect power coming from the substation and consolidate the power onto high voltage (230 kV) overhead transmission lines. The switchyard would include the following main equipment: (1) a control room, (2) electrical breakers, (3) an overhead electrical bus connecting the various electrical apparatus, and (4) pole structures to support electrical conductors entering the switchyard.

Two transmission line route options have been identified by the project proponent to deliver project electricity to the SCE Windhub substation (Figure 6). Both proposed transmission line options would consist of up to 15 miles of aboveground 230-kv lines that would likely be installed on metal monopoles, with conductors on one side. Both transmission line route options A and B are shown on Figure 6.

#### **Access and Maintenance Roads**

No temporary roads are proposed. All roads designed for construction are planned to be retained and possibly narrowed for use during operations. Permanent maintenance roads would be constructed for use during operation to access project facilities for maintenance. Because of topography, grading of access roads would, in some limited cases, disturb an area of 40 to 125 feet on either side of the centerline to accommodate appropriate cut or fill slopes to allow for the necessary road width and to comply with percent slopes per Kern County grading requirements and manufacturer specifications of construction and installation equipment. Some roads intended for permanent use would be temporarily widened to 36 feet and engineered to support heavy cranes and delivery vehicles. Following completion of construction, the temporarily widened portions of these roads would be restored, leaving 20- to 24-foot-wide permanent maintenance roads.

#### **Temporary Staging Areas and Temporary Concrete Batch Plants**

The project would require up to three temporary construction laydown yards (see Figure 2) to stage construction equipment, construction contractor trailers, and the offloading and temporary storage of project equipment and materials. The lay-down areas would be cleared of vegetation and compacted to support the construction equipment. At the end of construction, up to three laydown areas may be retained for long-term parts and equipment storage. Those lay-down areas not retained for permanent use would be reclaimed and re-vegetated.

An on-site, temporary, concrete batch plant would be required to provide concrete and materials for the turbine and transformer foundations. The concrete batch plant would operate between approximately 7:00 a.m. and 7:00 p.m., Monday through Saturday for up to 6 months. All remnant materials and debris would be hauled off site and disposed of at a certified location. Operation of the temporary, concrete batch plant would require a Conditional Use Permit (CUP) from Kern County.



### **Permanent Operations and Maintenance Facility**

One O&M Facility would be required for administration and maintenance of the Alta East Wind Project. The facility will be approximately 2 to 3 acres in size and have a foundation footprint of approximately 100 by 150 feet (building). The facility would include a main building with offices, SCADA system, control room, spare parts storage, restroom, shop area, outdoor parking facilities, lay-down area, a turnaround area for larger vehicles, outdoor lighting, and gated access with partial or full perimeter fencing as well as a small information center for visitors.

#### **Security Fencing**

Security fencing would be installed in accordance with Kern County zoning requirements, which allow either fencing the exterior boundary of the entire project property or each wind turbine cluster or row independently. At this time, it has not been determined which of these options would be used.

Security fencing consisting of new steel "T" posts would be installed at 10- to 15-foot intervals and with four strands of barbed wire a minimum of four feet high. The bottom strand of wire would be a minimum of 18 inches above ground. Signs warning of wind turbine dangers would be installed on all perimeter fencing at 300-foot intervals and at all points of ingress and egress. Fencing would not interfere with access to existing ROWs crossing the project area (e.g., transmission lines, railroad, gas pipelines, the Los Angeles Aqueduct, and public highways). Cattle guards may be installed in grazing areas.

Two types of gates would be installed:

- Main access entrances off county highways would consist of two 12-foot-wide swing gates, providing a 24-foot opening. The gates would be installed a reasonable distance off the highways to permit trucks delivering turbine components to pull completely off the highway before stopping to open the gate. The access areas would be graveled to prevent tracking of mud onto the paved highways.
- Interior access gates would provide access between the various fenced areas within the project site and would consist of one 10- to 16-foot-wide swing gate, wide enough to permit access for the normal maintenance vehicles and equipment. The post at the free end of the gate would be removable to permit the fence to be temporarily opened to 24 feet to allow access for large vehicles or cranes.

#### 1.4.2 CONSTRUCTION SCENARIO

Construction of the project is anticipated to commence in the spring of 2012 and require 9 to 12 months to complete. The sequence of construction activities for the project would generally be site preparation, access road installation, WTG foundation construction, electrical collection system installation, collector substation construction, WTG installation, final testing and turbine commissioning, and cleanup and restoration.

#### **Site Preparation**

Preparation of the project site for construction would involve land clearing and grading by removing topsoil and vegetation for roads, WTGs, and the substation. Land clearing and grading would be performed according to the Soil Erosion and Sedimentation Mitigation Plan approved by Kern County, the project's Regional Water Quality Control Board-approved Stormwater Pollution Prevention Plan, and the grading and building permits issued by Kern County (see Table 1 in Section 1.6).

#### **Access Road Installation**

The first step in access road installation would be rough grading and leveling of proposed roadway areas. Then, base rock would be trucked in, spread, and compacted to create a road base. Capping rock would then be spread over the road base and roll-compacted to finished grade. At completion of heavy construction, the road would be re-graded to a width of 20 to 24 feet for service as a permanent maintenance road or restored to pre-project conditions, as appropriate. For permanent maintenance roads, a final pass



would be made with the grading equipment to level the road surfaces, and more capping rock would be spread and compacted in areas where needed. In some very steep areas, the road might be paved. Water bars, similar to speed bumps, would be cut into the roads in areas where needed, to allow for natural drainage of water over the road surface and to prevent road washout. V-ditches and culverts would be installed, where necessary, to handle excess drainage water. All road work would be performed under final approved grading, erosion control, and stormwater quality management plans. Excess excavated soil and rock would be disposed of onsite at approved disposal areas, such as eroded gullies and ravines. Larger excavated rocks also would be disposed of at approved sites or crushed and re-used onsite as backfill or roadway material.

#### **Foundation Construction**

Each WTG would have a concrete and steel reinforced foundation with permanent mounting pads. Each pad would extend approximately 10 to 15 feet in all directions beyond the edge of the turbine foundation and transformer pad; this open area would be maintained free of vegetation for safety and fire control. Depending on the foundation type used, each WTG foundation could require approximately 90 cubic yards of 4,000- to 6,000-pound-per-square-inch (psi) test concrete and 80 cubic yards of 1,000-pounds per square inch (psi) slurry mix, totaling approximately 18 to 20 truckloads of concrete per WTG from the on-site temporary concrete batch plant.

Foundation construction would include the following stages: drilling, blasting (if required, although not currently anticipated), and hole excavation; outer form setting; rebar and bolt cage assembly; concrete casting and finishing; removal of the forms; backfilling and compaction; construction of the transformer foundation pad; and foundation site area restoration.

## **Electrical Collection System Installation**

After the roads, WTG foundations, and transformer pads are completed for a row of WTGs, underground electric cables would be installed along that road section. Trenches would be cut 3 to 5 feet deep for each cable circuit and electric cables would be laid in the trenches, surrounded with a cushion of clean fill, inspected, and the trenches backfilled. The 34.5 kV cables would be connected to the WTG pad-mounted transformers, and low-voltage wiring between the transformers and the bus cabinet inside the WTG towers would be completed, inspected, and tested.

In cases where the distance to the substation is excessive, or where terrain and/or obstacles dictate such, the underground cables may connect to an overhead collection system on wood or steel poles that would more efficiently transport the power to the project collection substation. As part of the final design engineering, a field survey would be conducted to determine the exact power pole locations for overhead collector lines, if required. Holes would be drilled and the poles erected with a small crane or boom truck. The poles would be set in place using concrete or compacted clean fill, according to the engineer's specifications. The overhead lines would be connected to the underground cables at each end through a fused disconnect switch, to ensure personnel safety.

#### **Collector Substation Construction**

Construction of the collector substation and interconnection facilities would involve several stages of work, including grading of the collector substation area; installation of a grounding mat; construction of several foundations for the transformers, power circuit breakers, and structures; erection and placement of the steel work and all outdoor equipment; and electrical work for all of the required terminations. The entire collector substation would be enclosed with a chain link security fence. Following construction, an inspection and commissioning test plan would be executed prior to the collector substation being energized.



#### **Wind Turbine Generator Installation**

Once adequate turbine pad sites and site roads are prepared, the individual WTG components, tower sections, nacelle, hub and rotor blades, would be shipped to the construction site in two to five sections. After setting the WTG electrical bus cabinet and ground control panels on the foundation, the tower would be erected by crane in sections. Tower construction would be followed by hoisting and installation of the nacelle; assembly, hoisting, and installation of the rotor; connection and termination of internal cables; and inspection and testing of the electrical system.

#### Water Supply and Usage

During construction, water use would be temporary and required for onsite mixing of concrete as well as for dust abatement activities. Any water that is needed for construction would likely be trucked in from nearby municipalities, such as Mojave or Tehachapi, or by a new on-site well. Operation of a wind energy facility requires very small amounts of water. Water for the O&M Building during operation would either be provided by a new on-site well, by purchase of water from the Tehachapi Cummings Valley Water District (TCVWD), or would be trucked in from off-site and stored adjacent to the building.

### **Final Testing and Turbine Commissioning**

After construction, all project facilities, systems, controls, and safety equipment would be calibrated and tested before being commissioned to ensure compliance with required specifications and proper working order. Testing would be conducted by qualified technicians and electricians.

### **Cleanup and Restoration**

After construction, preconstruction land contours at the project site would be restored to the extent feasible. All areas of temporary disturbance would be reseeded with a seed mixture appropriate to the Project site in accordance with Kern County or other regulatory agencies. All construction debris and waste would be removed from the site and disposed of at an appropriate location.

#### 1.4.3 OPERATION AND MAINTENANCE

Upon completion of all construction activities, the project applicant would ensure that the facility would be properly operated and maintained. Up to 15 full-time and part-time staff, including wind turbine technicians, operations personnel, administrative personnel and managers, would be employed to operate and maintain the project. Staff would be responsible for implementing the project's Standard Operating Procedures, operating the SCADA system, and performing maintenance and repair work.

The applicant would develop an operations and maintenance protocol to be implemented throughout the life of the project. The protocol would specify routine turbine maintenance and operation, which typically adheres to the maintenance program developed by the turbine manufacturer. O&M personnel would conduct maintenance activities for each wind turbine required by the routine schedule provided by the turbine supplier or as required to keep the equipment in operation. On average, each turbine would require 40 to 50 hours of scheduled mechanical and electrical maintenance per year. Routine maintenance may include, but would not be limited to, replacing lubricating fluids, checking parts for wear and replacing, as required, and recording data from data-recording chips in all pertinent equipment including anemometers. O&M personnel would also inspect and maintain access roads, crane and turbine pads, erosion control systems, and perimeter fencing areas regularly and maintain them to ensure minimal degradation.

The proposed wind turbines would also be monitored continuously by the SCADA system of the project. Each turbine would be equipped with monitors that communicate major aspects of operation through communication lines. The SCADA system would send notification to the operations group if operational characteristics deviate outside set limits and, as described above, the turbines would be equipped with an

# KERN COUNTY PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT ALTA EAST WIND PROJECT



automatic braking system to shut down the turbine blades in such an event. O&M personnel would address all operational deviations and place the equipment back in service safely and in a timely manner.

The Kern County General Plan Safety Element further outlines protocol that would ensure that the project property is properly maintained. These measures include identifying access and evacuation routes at the project property, clearing dry vegetative cover, limiting potential fuel sources, and designing firebreaks (by at minimum adhering to the established setback distances). The project would implement all relevant safety measures into the operation and maintenance of the project in order to ensure the safety to the employees, visitors, and residents within the vicinity of the project property.



#### 1.5 PROJECT OBJECTIVES

The following project objectives have been identified by the lead agencies and the applicant:

- Help the federal government reach its renewable energy goals;
- Support California's Renewable Portfolio Standard (RPS) and California Assembly Bill 32 by serving as a source of clean renewable energy, reducing the need for electricity generated from fossil fuels and offsetting greenhouse gas emissions;
- Deliver wind energy in the Tehachapi Wind Resource Area (TWRA) according to an executed Master Power Purchase and Wind Project Development Agreement (MDA) with SCE;
- Increase the tax base of Kern County;
- Provide increased revenue to BLM for the use of the federal land;
- Create a substantial number of temporary and permanent jobs in the county;
- Boost local business activity during construction and operation; and
- Provide revenue to county residents who own underutilized land that has little potential to be developed for other uses while allowing these landowners to retain much of their current land use.

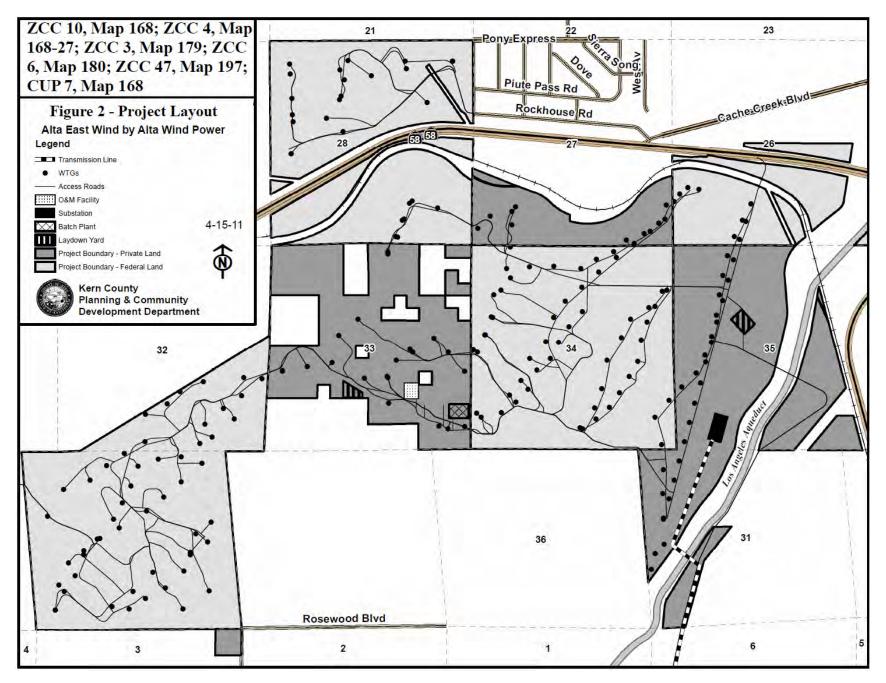


# 1.6 PROPOSED DISCRETIONARY ACTIONS/REQUIRED APPROVALS

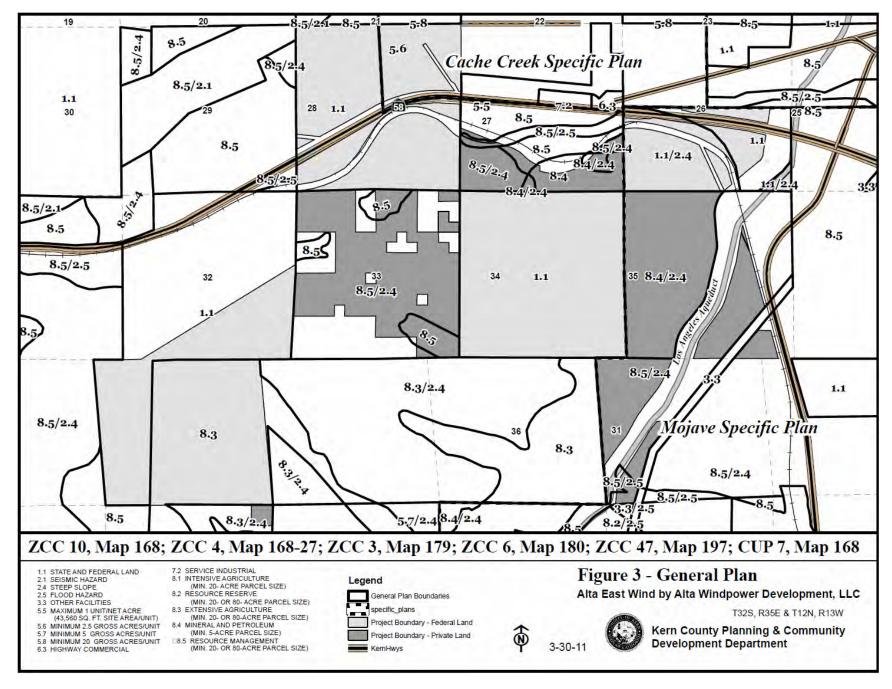
Construction and operation of the project may require certain discretionary actions and approvals including, but not limited to, those presented in Table 3, below.

Table 3. Proposed Discretionary	Actions/Required Approvals
Agency	Permit/Authorization
	FEDERAL
Bureau of Land Management	<ul> <li>ROW Grant pursuant to the Federal Land Policy and Management Act</li> <li>California Desert Conservation Area (CDCA) Plan Amendment</li> </ul>
Tribal Historic Preservation Office/State Historic Preservation Office	<ul> <li>Programmatic Agreement or determination of No Adverse Effect under Section 106 consultation pursuant to the National Historic Preservation Act</li> <li>Native American consultation</li> </ul>
U.S. Fish and Wildlife Service	<ul> <li>Biological Opinion or determination of No Adverse Effect under Section 7 consultation pursuant to the Endangered Species Act</li> <li>Programmatic Take Permit pursuant to the Bald and Golden Eagle Protection Act (if deemed required and if available)</li> </ul>
Federal Aviation Administration	<ul><li>Notice of Proposed Construction or Alteration Application</li><li>Determination of No Hazard</li></ul>
	STATE
California Department of Fish and Game	<ul> <li>Streambed Alteration Agreement pursuant to California Fish &amp; Game Code Section 1602</li> <li>California Endangered Species Act Section 2081 Incidental take permit and/or Section 2080.1 Consistency Determination</li> </ul>
Lahontan Regional Water Quality Control Board (Region 6)	<ul> <li>Waste Discharge Requirements</li> <li>National Pollutant Discharge Elimination System (NPDES) General Permit for discharges associated with construction activity</li> <li>Stormwater Pollution Prevention Plan</li> </ul>
	LOCAL
Kern County	<ul> <li>Changes in Zone Classification (Discretionary)</li> <li>Conditional Use Permit (Discretionary)</li> <li>General Plan Amendment (Discretionary)</li> <li>Public easement vacations (Discretionary; if deemed required)</li> <li>Grading Permit (Ministerial)</li> <li>Building, electrical, and well permits (Ministerial)</li> <li>Franchise Agreement (Discretionary; if deemed required)</li> </ul>
Kern County Air Pollution Control District	Authority to Construct/Permit to Operate
Los Angeles Department of Water and Power	Los Angeles Aqueduct Encroachment/Crossing Permit

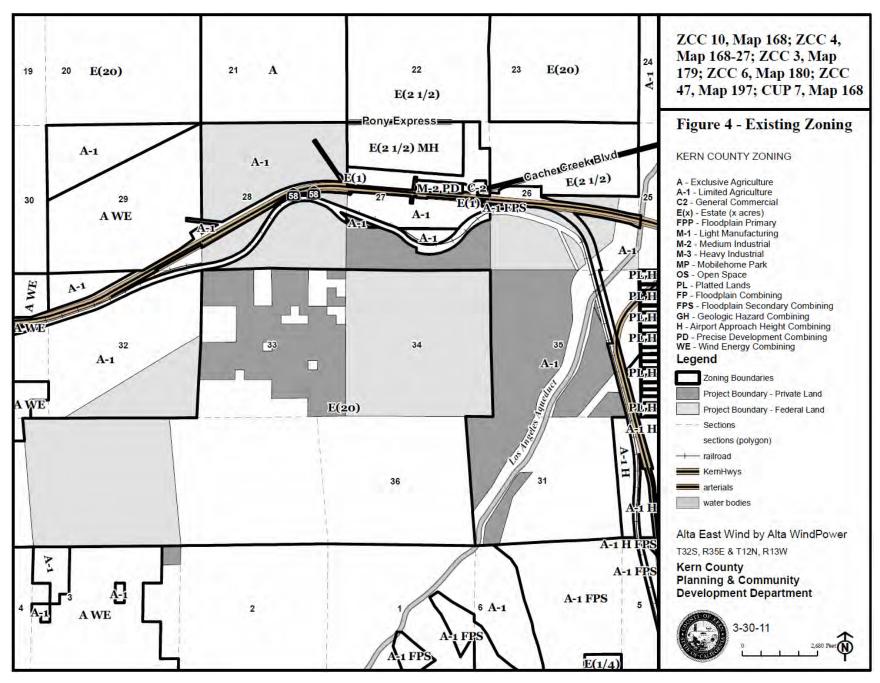




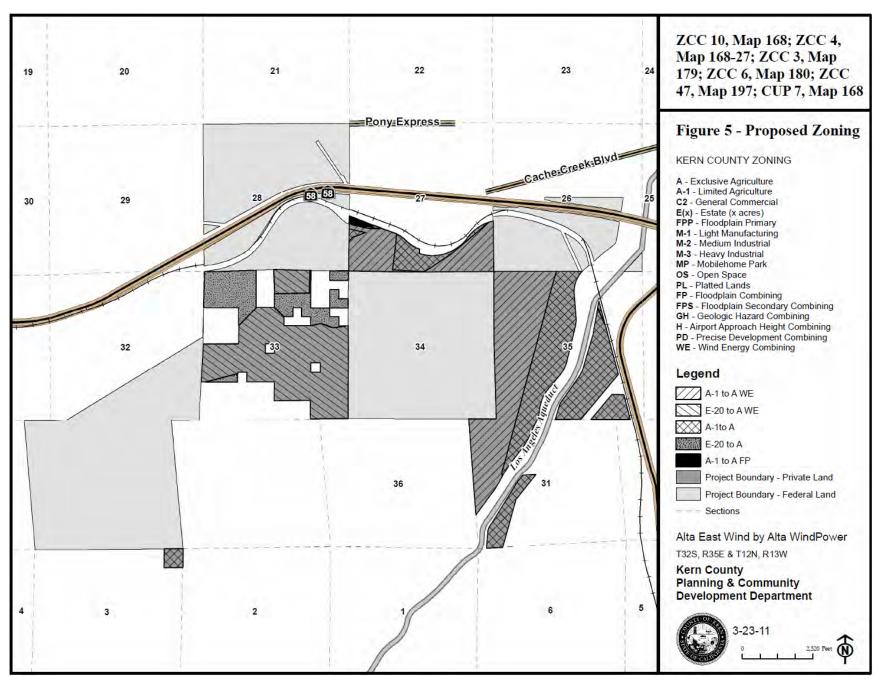




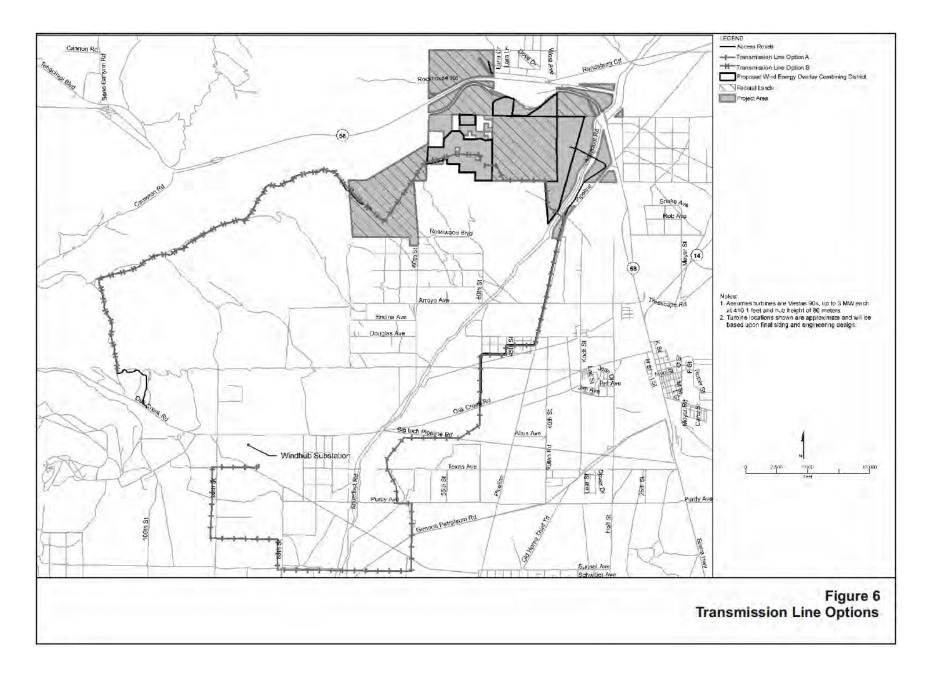














# KERN COUNTY ENVIRONMENTAL CHECKLIST FORM

# **Environmental Factors Potentially Affected:**

The environmental factors checked below would be potentially affected by this proposed Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

$\boxtimes$	Aesthetics	Agriculture & Forestry Resources	Air Quality			
	Biological Resources	Cultural Resources	Geology / Soils			
	Greenhouse Gas Emissions	Hazards & Hazardous Materials	Hydrology / Water Quality			
	Land Use and Planning	Mineral Resources	Noise Noise			
	Population and Housing	□ Public Services	□ Recreation			
	Transportation & Traffic	☐ Utilities / Service Systems	Mandatory Findings of Significance			
DE	TERMINATION (To be con	npleted by the Lead Agency)				
On	the basis of this initial evalua	tion:				
	I find that the proposed NEGATIVE DECLARATI	project COULD NOT have a significant ON will be prepared.	effect on the environment, and a			
	be a significant effect in the	posed project could have a significant effectis case because revisions in the project have GATED NEGATIVE DECLARATION will	e been made by or agreed to by the			
$\boxtimes$	I find that the proposed p MENTAL IMPACT REPO	roject MAY have a significant effect on the RT is required.	e environment, and an ENVIRON-			
	unless mitigated" impact o earlier document pursuant based on the earlier analys	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENT IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.				
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.					
	/s/	<del></del>				
Sig	nature	Da	ate			
	Jacquelyn R. Kitchen					
Pri	nted Name	Printed Name For				

# KERN COUNTY PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT ALTA EAST WIND PROJECT



#### **Evaluation of Environmental Impacts:**

- (1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- (2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- (3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- (4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measure and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- (5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration, Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - (a) Earlier Analysis Used. Identify and state where they are available for review.
  - (b) Impacts Adequately Addressed. Identify which effects from the above checklist where within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - (c) Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- (6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- (7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- (8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- (9) The explanation of each issue should identify:
  - (a) The significance criteria or threshold, if any, used to evaluate each question.
  - (b) The mitigation measure identified, if any, to reduce the impact to less than significant.



	PSTHETICS Would the president	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic	$oxed{\boxtimes}$			
b.	vista?  Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?				
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	$\boxtimes$			
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

- (a) Development of the project and all facilities in the foothills of the Tehachapi Mountain Range would alter the views of the project area. Persons traveling in vehicles on nearby roads and hikers/ equestrians passing near the project area along the Pacific Crest National Scenic Trail would observe substantial alterations to these existing views. The project would potentially result in significant alteration to existing scenic vistas. Therefore, this potential impact will be further evaluated in the EIR/EIS.
- (b) The project would not be visible from any Officially Designated (OD) State or County Scenic Highway, as none exist in Kern County. However, both SR-14 north of Mojave and SR-58 east of Mojave are designated as Eligible (E) for State Scenic Highway status (California Department of Transportation, 2011). The project would be visible from portions of SR-14 north of Mojave and SR-58 east of Mojave. As development of the project and all facilities would alter existing views of the project area, the project could substantially damage the viewsheds of these Eligible State Scenic Highways. Therefore, this potential impact will be further evaluated in the EIR/EIS.
- (c) Most of the project area supports native desert plant communities, predominately scrub brush, which are partially degraded by past and current grazing activities and by a network of paved and dirt roads. Lands managed by BLM along the projects western edge are mostly undeveloped. Existing land uses at and in the immediate vicinity of the project site include existing WTGs of varying heights and ages, overhead high-voltage transmission lines, grazing areas with rural fences, paved and unpaved roads, and undeveloped areas. Off-road vehicle (ORV) or off-highway vehicle (OHV) activities occur in the project vicinity and the Pacific Crest Trail passes within one mile of the northwestern portion of the project area. Development of the project and all facilities would represent a substantial visual change and increase the industrial character of the project site and its surroundings. Therefore the project's potential to substantially degrade the existing visual character or quality of the site and its surroundings will be further evaluated in the EIR/EIS.



(d) The only existing source of light on the project site is from existing wind turbine generators to the north and rural residential development in the area. The WTGs would have a non-reflective finish and are not expected to be a source of glare. The project WTGs and meteorological towers will likely require nighttime lighting per FAA regulations, which could adversely affect nighttime views in and of the area. The type of lighting that the FAA would require has not yet been determined, but is anticipated to be red flashing lights. Additionally night lighting may be required for permanent structures (e.g., O&M building and substation) and would be consistent with the requirements of the Kern County Zoning Ordinance. Given the potential for the project to create a new source of nighttime lighting, this potentially significant impact will be evaluated in the EIR/EIS.



	Potentially Significant		
Potentially	Impact	Less Than	
Significant	Unless	Significant	No
Impact	Mitigated	Impact	Impact

AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	1 3			
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?			
b.	Conflict with existing zoning for agricultural use, or Williamson Act contract?	$\boxtimes$		
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland zoned Timberland Productions (as defined in Public Resources Code section 51104(g))?			
d.	Result in the loss of forest land or conversion of forest land to non-forest use?			
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	$\boxtimes$		
f.	Result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15206(b)(3) Public Resources Code?			

### **Discussion:**

(a) There is no designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project area according to the California Division of Land Resource Protection Farmland Mapping and Monitoring Program Important Farmland maps. The project site has two land use designations according to the Department of Conservation: Grazing Land; and Non-agriculture and Natural Vegetation. Grazing Land is land on which the existing vegetation is suited for



grazing of livestock. Non-agriculture and Natural Vegetation includes heavily wooded, rocky or barren areas, riparian and wetland areas, small water bodies, and constructed wetlands, and grassland areas, which do not qualify for grazing. Although the project would remove some grazing land from agricultural use, the project would not result in the conversion of designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a nonagricultural use. Nevertheless, the EIR/EIS will discuss the potential conversion of Grazing Land and Nonagricultural and Natural Vegetation land to a nonagricultural use.

(b) The Alta East Wind Project site is not located on lands that are under a Williamson Act contract. However, portions the project include the following agricultural land use designations:

# • <u>Project Site</u>:

*General Plan Designation* – Extensive Agriculture; *Zoning Designation*: A-1 (Limited Agriculture).

#### • Transmission Line Route:

*General Plan Designations* - 4.1 (Resource Agriculture), 8.3 (Extensive Agriculture; *Zoning Designation* - A-1 (Limited Agriculture).

As construction and operation of the project would remove some land from agricultural use and change agricultural land use designations, potential impacts may occur and will be further analyzed in the EIR/EIS.

- (c)/(d) Both the project site and transmission line route options (including immediate surrounding properties) do not contain any land defined as forest land (as defined by Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or land zoned Timberland Production (as defined by Government Code section 51104(g)). No conversion of forestland to non-forest use or loss of forestland is expected to occur with the project. Nevertheless, the EIR/EIS will discuss this issue.
- (e) As discussed above in checklist question (b), construction and operation of the project would remove some land from agricultural use. Potential impacts from this change may occur and will be further analyzed in the EIR/EIS.
- (f) The Alta East Wind Project site is not located on lands that are under any land preservation contracts such as Williamson Act contracts. Therefore, the project would not result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15206(b)(3) Public Resources Code. No impacts would occur; nevertheless, the EIR/EIS will discuss this issue.



		Potentially	Potentially Significant Impact	Less Than	
		Significant Impact	Unless Mitigated	Significant Impact	No Impact
ma	R QUALITY. Where available, the significant nagement or air pollution control district may all the project:	nce criteria esta	blished by the	applicable air q	<sub>l</sub> uality
a.	Conflict with or obstruct implementation of the applicable air quality plan?				
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under ar applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? Specifically, would implementation of the project exceed any of the following adopted thresholds:				
	i. San Joaquin Valley Unified Air Pollution Control District:				
	Operational and Area Sources:				
	Reactive Organic Gases (ROG) 10 tons per year.				
	Oxides of Nitrogen (NO <sub>x</sub> ) 10 tons per year.				
	Particulate Matter ( $PM_{10}$ ) 15 tons per year.				
	Stationary Sources determined by District Rules:				
	Severe Nonattainment 25 tons per year.				
	Extreme Nonattainment 10 tons per year.				
	ii. Kern County Air Pollution Control District	•			
	Operational and Area Sources:				
	Reactive Organic Gases (ROG) 25 tons per year.				
	Oxides of nitrogen $(NO_x)$ 25 tons per year.				
	Particulate Matter (PM <sub>10</sub> ) 15 tons per year.				



		Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
	Stationary Sources – determined by District Rules:				
	25 tons per year.				
d.	Expose sensitive receptors to substantial pollutant concentrations?				
e.	Create objectionable odors affecting a substantial number of people?				

- (a)/(b) The project would be located entirely within the jurisdiction of the Eastern Kern Air Pollution Control District (APCD) in the Mojave Desert Air Basin (MDAB). The MDAB is designated non-attainment for both the State and federal ozone standards, and the State particulate matter of less than 10 microns in size (PM10) standard. Equipment usage and activities during construction of the project would result in emissions of PM10 and ozone precursors, including nitrogen oxides (NOx) and volatile organic compounds (VOC), which could result in significant impacts to air quality in the area. The sources of emissions include heavy equipment used to excavate and grade the turbine pads and roads, cranes, and on-road motor vehicles for equipment and material deliveries and workers commuting to the site. Activity on unpaved roads and lay-down areas and grading would contribute to PM10 emissions. This impact is potentially significant. Further analysis of air quality impacts is warranted to determine whether the project would conflict with or obstruct implementation of the applicable plans for attainment and if so, to determine the reasonable and feasible mitigation measures that could be imposed. Short-term construction emissions and temporary facilities could significantly contribute to an existing or projected air quality violation of PM10 or ozone standards, requiring the consideration of mitigation measures. These issues will be evaluated in the EIR/EIS.
- (c) The Eastern Kern APCD is a nonattainment area for the State and federal ozone standards, and the State PM10 standard, and the Eastern Kern APCD rules and regulations apply to all project activities. No project activities would occur within the San Joaquin Valley Unified Air Pollution Control District. Cumulative contributions to the MDAB could be potentially significant. Cumulative contribution of construction and operational emissions will be analyzed in the EIR/EIS.
- (d) Land uses determined to be "sensitive" to air quality include residential areas, schools, convalescent and acute care hospitals, parks and recreational areas, and churches. The nearest sensitive receptors to the project are residences and recreational areas within and adjacent to the project boundaries. Construction-related activity and temporary facilities would result in diesel exhaust emissions and dust that could adversely affect air quality for the nearest sensitive receptors. Mitigation measures for diesel equipment and dust control that are recommended by the Eastern Kern APCD will be evaluated as part of the EIR/EIS to avoid or reduce the impacts to construction workers and affected sensitive receptors.
- (e) Aside from odors associated with vehicle exhaust and fueling, no other odors would result from the project. Due to the limited reach of these odor sources and the distance of potential receptors in the vicinity of these activities, fueling odors during project construction would not impact a substantial number of people. Therefore, the project is not expected to result in significant impacts to air quality related to objectionable odors; nevertheless, the EIR/EIS will discuss this issue.



		Potentially Significant	Potentially Significant Impact Unless	Less Than Significant	No
		Significant Impact	Mitigated <b>Mitigated</b>	Impact Impact	Impact
BI	OLOGICAL RESOURCES. Would the proje	ect:			
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d.	Interfere substantially with the movement of any native resident or migratory fish or wild- life species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?	$\boxtimes$			

- (a) Field surveys have identified several special-status, including federally and State-listed, species within and adjacent to the project area. Construction and operation of the project has the potential to result in significant direct and indirect impacts to these species and their habitat. Therefore, this potential impact will be further evaluated in the EIR/EIS.
- (b)-(c) The project area supports numerous desert washes that are likely under the jurisdiction of California Department of Fish and Game (CDFG) as waters of the State and potentially also under the jurisdiction of U.S. Army Corps of Engineers. Other sensitive natural communities identified in

# KERN COUNTY PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT ALTA EAST WIND PROJECT



local or regional plans, policies, and regulations or by the CDFG or United States Fish and Wildlife Service (USFWS) may also be present within the project area. These potentially significant impacts to jurisdictional wetlands and other water, as well as sensitive natural communities, will be evaluated in the EIR/EIS.

- (d) The project area and vicinity may be used for migration or dispersal by wildlife, including bats, migratory birds, desert tortoise and other reptiles, as well as mammals. Further, the project area may, although is not currently known to, contain movement corridors essential for population connectivity. Birds and bats may be subject to mortality during wind turbine operation if they collide with the towers or turbine blades. Construction of the project would potentially impede migration and/or habitat connectivity. This impact is potentially significant and will be evaluated in the EIR/EIS.
- (e) Ordinances from the Kern County General Plan pertaining to protection of biological resources may apply to the project area. Consistency with this and other local policies or ordinances will be evaluated in the EIR/EIS.
- (f) Portions of the project are located within the California Desert Conservation Area Plan and its amendment, the West Mojave Plan. Consistency with these and any other or approved local, regional, or State habitat conservation plans will be evaluated in the EIR/EIS.



		Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
CU	JLTURAL RESOURCES. Would the project		J	•	•
a.	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	$\boxtimes$			
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	$\boxtimes$			
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	$\boxtimes$			
d)	Disturb any human remains, including those interred outside of formal cemeteries?	$\boxtimes$			

- (a) Cultural resources surveys will be completed for the site and the transmission route options. The results of these surveys will be included within the EIR/EIS. Further evaluation is warranted to identify potential impacts and formulate avoidance or mitigation measures, if applicable.
- (b) Archaeological surveys will be completed for the site and the transmission route options. The results of these surveys will be included within the EIR/EIS. Further evaluation is warranted to identify potential impacts and formulate avoidance or mitigation measures, if applicable.
- (c) A paleontological records search and survey will be completed for the project site and transmission line route options. The results of the records search and survey will be included within the EIR/EIS. The Horned Toad Formation, a geological formation with a high sensitivity for paleontological resources, is located within the project site. Potential impacts to paleontological resources and mitigation measures will therefore, be evaluated in the EIR/EIS.
- (d) If human burial grounds are identified in any part of the project area, the project would be redesigned to avoid them. Given the sensitivity of the project area, the potential for locating human remains is reasonably foreseeable, and therefore, potentially significant. The EIR/EIS will evaluate this potential impact and identify measures to be implemented if any are unexpectedly uncovered during the course of development.



		Potentially Significant Impact		Less Than Significant Impact	No Impact
GI	EOLOGY AND SOILS. Would the project:				
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	$\boxtimes$			
	ii) Strong seismic ground shaking?	$\boxtimes$			
	iii) Seismic-related ground failure, including liquefaction?				
	iv) Landslides?				
b.	Result in substantial soil erosion or the loss of topsoil?				
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				

- (a) (i) The entire County is located in a seismic Zone 4, a designation previously used in the Uniform Building Code (UBC) (the predecessor to the International Building Code) to denote the areas of highest risk to earthquake ground motion. An Alquist-Priolo Special Study Zone does not cross the project site or the transmission line route options. However, the project area is located near major earthquake faults, and, therefore, may have the potential to expose people or structures to adverse effects. Significant seismic activity in the area could adversely affect structures and workers on the site. This issue will be evaluated in the EIR/EIS.
  - (ii) As discussed above in checklist question (a)(i), the project is located in a seismically active area. Strong seismic ground shaking could occur at the project site, resulting in damage to



- structures that are not properly designed to withstand strong ground shaking. The project would potentially be subject to moderate to strong ground shaking from local and regional earthquakes. This potential impact will be evaluated in the EIR/EIS.
- (iii) The project area has not been identified by the Safety Element of the Kern County General Plan (2007) as an area that is subject to liquefaction hazards. However, due to the potential for major seismic activity in the project area, the potential for substantial adverse effects due to seismic-related ground failure, including liquefaction, will be examined in the EIR/EIS.
- (iv) Although the project site is not considered to be at high-risk area for landslides, the potential for substantial adverse effects due to landslides will nevertheless be analyzed in the EIR/EIS.
- (b) Grading and excavation would be required for foundations for each WTG tower. Grading would also be required for construction of access roads throughout the project site. Construction activities could result in substantial soil erosion if the improved access roads and/or turbine sites are not properly designed. These issues and the potential for increased erosion will be evaluated in the EIR/EIS.
- (c) The geotechnical report will examine the current baseline stability of the soils that underlie the project area and the findings of that report will be presented and evaluated in the EIR/EIS. The project would be designed such that it would not degrade the stability of the underlying soils. Because of this, potential impacts are expected to be less than significant. However, the findings of the geotechnical report and these issues will be evaluated in the EIR/EIS and mitigation measures will be presented, if necessary, to protect both structures and people from adverse effects due to landslide, lateral spreading, subsidence, liquefaction, or collapse.
- (d) The soil present at the site and along the transmission line route options are primarily sands, gravels and rock that typically would not exhibit shrink and swell characteristics. Expansive soils generally result from specific clay minerals that expand when saturated and shrink in volume when dry. Although clays and other fine grained soils are not expected to be common at the project site, the EIR/EIS will confirm and evaluate the presence or absence of expansive soils.
- (e) The project would include construction of a limited septic system or leach lines to accommodate on-site operations facilities if required by the Kern County Environmental Health Services Division; therefore, the ability of soils within the project area to support a septic tank will be examined in the EIR/EIS.



Potentially Significant  Potentially Impact Less Than Significant Unless Significant No Impact Mitigated Impact Impact  GREENHOUSE GAS EMISSIONS. Would the project:							
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?						
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	$\boxtimes$					

(a)/(b) Global climate change is an international phenomenon, and the regulatory background and scientific data are changing rapidly. In 2006, the California state legislature adopted AB 32, the California Global Warming Solutions Act of 2006. Assembly Bill (AB) 32 describes how global climate change would affect the environment in California. The impacts described in AB 32 include changing sea levels, changes in snow pack and availability of potable water, changes in storm flows and flood inundation zones, and other impacts.

As required by AB 32, California Air Resources Board (CARB) determined what the statewide greenhouse gas (GHG) emissions level was in 1990 and then approved a statewide GHG emissions limit that is equivalent to that level, which is to be achieved by 2020. CARB approved the 2020 limit on December 6, 2007. CARB's GHG inventory estimated the 1990 emissions level in California to be 427 million metric tons carbon dioxide equivalent (MMTCO2e). In 2004, the emissions were estimated to be 480 MMTCO2e.

The primary source of GHG emissions from the project during operation would be mobile sources. Not all GHGs exhibit the same ability to induce climate change; therefore, GHG contributions are commonly quantified in carbon dioxide equivalencies. The carbon dioxide equivalent (CO2e) portion of GHGs from the project will be estimated in an air quality impact analysis using the URBEMIS program and California Climate Action Registry (CCAR) General Reporting Protocol. These emissions would be predominantly produced during construction and therefore would be short term in duration and would not have a continual impact on the environment. The project's operational emissions are expected to be low. Regardless, since this project would replace the creation of energy through other methods, such use of a natural gas—fired turbine, the operational GHG emissions may have a reduction in GHG emissions. Impacts related to GHGs and climate stemming from the project and any potential conflicts with any applicable plan or policy will be evaluated in the EIR/EIS.



		Potentially	Potentially Significant ially Impact	Less Than	
		Significant Impact	Unless Mitigated	Significant Impact	No Impact
HA	AZARDS AND HAZARDOUS MATERIAL	<b>S.</b> Would the p	project:		
a.	Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?				
b.	Create a significant hazard to the public or the environment through reasonably foresee- able upset and accident conditions involving the release of hazardous materials into the environment?				
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e.	For a project located within the adopted Kern County Airport Land Use Compatibility Plan, would the project result in a safety hazard for people residing or working in the project area?				
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				



			Potentially Significant		
		Potentially Significant Impact	Impact Unless Mitigated	Less Than Significant Impact	No Impact
i.	Would implementation of the project generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste? Specifically, would the project exceed the following qualitative threshold:				
	i. Occur as immature stages and adults in numbers considerably in excess of those found in the surrounding environment; and				
	ii. Are associated with design, layout, and management of project operations; and				
	ii. Disseminate widely from the property; and				
	iv. Cause detrimental effects on the public health or well being of the majority of the surrounding population.				

- (a) The project is not expected to result in impacts from hazards and hazardous materials with respect to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials because the project would not involve the routine transport, use, or disposal of hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act. The only hazardous materials expected to be transported to and from the site include transformer oil (which is used in electrical transformers), vehicle fuel, carburetor fluid, and various types and grades of lubrication oil, all of which are expected to be used in small quantities for project construction and daily maintenance during operations. However, the EIR/EIS will evaluate the transport and use of these materials. The closest route that is designated for the transport of hazardous materials is State Route (SR) 58, located immediately adjacent to the project site. The project does not anticipate the need for blasting to prepare WTG foundations. However, in the unlikely event that blasting is required it will be evaluated in the EIR/EIS.
- (b) Potential impacts that may result from construction and operation of the project include the accidental release of storage materials such as transformer oil, which is used in electrical transformers for turbines, vehicle fuel, carburetor fluid, and various types and grades of lubricants, solvents, and oils. The toxicity and potential release of these materials will depend on the quantity, the type of storage container, safety protocols used on the site, the location and/or proximity to receptors, the frequency and duration of spills or storage leaks, and the reactivity of hazardous substances with other materials. The use of all materials used on site, how the materials will be transported, in what form they will be used, possible environmental contamination or worker exposure, and identification of all regulations and standard protocols to be followed during the storage, transportation, and usage of any hazardous materials will be evaluated in the EIR/EIS.
- (c) There are no schools located within one mile of the project site or transmission line route options. The nearest school is the Douglas Adult School and the Mountain View Continuation School, which are located two miles to the south. The use of materials such as transformer oil, which is

# KERN COUNTY PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT ALTA EAST WIND PROJECT



used in electrical transformers for turbines, vehicle fuel, carburetor fluid, and various types and grades of lubricants, solvents, and oils do not have the potential to extend beyond the work areas on-site. Project-related infrastructure would not emit hazardous materials or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or school. Nevertheless, potential impacts will be discussed in the EIR/EIS.

- (d) The project is not located on the lists of parcels relating to hazardous wastes pursuant to Section 65962.5 of the California Government Code. Nevertheless, potential impacts will be discussed in the EIR/EIS.
- (e) The project area is located approximately 2.5 miles from the Mojave Air and Space Port, 10 miles from the California City Municipal Airport, 12.5 miles from the Mountain Valley Airport and 13 miles from the Tehachapi Municipal Airport. Safety hazards for people residing or working in the project area with respect to the project's proximity to a public or military use airport are expected to be less than significant due to the distances from such facilities. However, the EIR/EIS will evaluate potential impacts related to aviation safety hazards and compliance with the Kern County Airport Land Use Compatibility Plan (ALUCP), Federal Aviation Administration (FAA) 7460, and military airspace requirements.
- (f) The project site is not located within 2 miles of a private airstrip. No safety hazard for people residing or working in the project area with respect to the project's proximity to a private airstrip is expected to occur due to the distances from such facilities. Nevertheless, potential impacts will be discussed in the EIR/EIS.
- (g) Operation of the project is not anticipated to physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the site. Therefore, no operational impacts related to impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan is anticipated. However, construction of the project would generate construction trips and potential roadway lane closures that could temporarily increase the daily traffic volumes on local roadways and intersections, thereby impeding emergency access. Therefore, the potential for project construction-related traffic to impair or interfere with emergency response or evacuation plans will be evaluated in the EIR/EIS.
- (h) The project site is under the jurisdiction of the Kern County Wildland Fire Management Plan. This plan documents the wildland fire situation within the county. The project site is within a State Responsibility Area (SRA), and the California Department of Forestry and Fire Protection (CAL FIRE) implements wildfire planning and protection for the SRA. The project site and transmission line route options would be located in an area highly susceptible to wildfires. Vegetation consists of juniper woodland, mixed chaparral, Joshua tree woodland, and bitterbrush, with areas of introduced annual grasses, and native needle grass grassland, and areas of single-leaf pinyon pine woodland. The potential for construction and operation of the project to result in increased risk of wildfires in the project area will be evaluated in the EIR/EIS. The evaluation will include a review of the 2004 Kern County Fire Department Wildland Fire Management Plan and CAL FIRE's and Kern County Fire Department's prevention measures for wildland fires.
- (i)(i-iv) The project would result in construction of WTGs, substations, transmission line infrastructure, and O&M facilities. Project-related infrastructure is not expected to result in features or conditions (such as standing water, agricultural products, agricultural waste, or human waste) that would provide habitat for vectors such as mosquitoes, flies, cockroaches or rodents. Workers would generate small quantities of solid waste (i.e., trash) that would be appropriately stored for permanent disposal. Nevertheless, potential impacts will be discussed in the EIR/EIS.



		Potentially	Potentially Significant Impact	Less Than	
		Significant Impact	Unless Mitigated	Significant Impact	No Impact
H	YDROLOGY AND WATER QUALITY. Wo	ould the projec	t:		
a.	Violate any water quality standards or waste discharge requirements?	$\boxtimes$			
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-site or off-site?				
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site?				
e.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
f.	Otherwise substantially degrade water quality?	$\boxtimes$			
g.	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	$\boxtimes$			
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	$\boxtimes$			
j.	Inundation by seiche, tsunami, or mudflow?	$\boxtimes$			



- (a) Construction of the project would be subject to County, State, and federal water quality regulations. This includes, but is not limited to, required adherence to the federal Clean Water Act, National Pollutant Discharge Elimination System requirements, the National Flood Insurance Act, requirements of the California Department of Water Resources, adherence to the requirements of the California Fish and Game Code, the California Water Code, the requirements of the Kern County General Plan and Zoning Ordinance, etc. Development of the project would result in a significant impact to hydrology and water quality if associated construction, maintenance, or decommissioning activities would result in the violation of any water quality or waste discharge standards. Such violations could occur through the creation of erosion, sedimentation, and/or polluted runoff, through the accidental release of potentially hazardous materials required during construction or operational activities, or through the discharge of contaminated groundwater during dewatering activities. It is anticipated that appropriate best management practices and compliance with applicable regulations would reduce potential water quality impacts to a less than significant level; however, this potential impact will be evaluated fully in the EIR/EIS.
- (b) The project may include the construction of a new water well in order to supply water to the project during construction. If the project applicant is unable to secure the use of water via a new well within the project boundary, then water would be imported via truck to the site for use in the temporary concrete batch plant as well as for dust abatement activities. The project is located in the jurisdiction of the Regional Water Quality Control Board, Lahontan Region 4. Because the project would not include a substantial increase in impervious surfaces, the project is not anticipated to interfere substantially with groundwater recharge. However, a Water Supply Assessment is being prepared to analyze groundwater supplies and recharge in the project area, and the EIR/EIS will analyze potential hydrology and water quality impacts associated with this issue.
- (c) Grading would be required for access roads throughout the project site. Leveling and excavation would be required for each WTG installation site. The turbines would require the construction of concrete pads and fencing and would be strategically placed on the topography in turbine rows. Transmission line poles would also require grading. The construction of these project features could potentially alter the existing drainage pattern of the site or area. Evaluation of impacts to drainage patterns resulting from project components, as well as the potential for increased erosion and/or siltation will be evaluated in the EIR/EIS.
- (d) An increase in impervious surfaces could increase stormwater run-off. As discussed above in checklist question (c), project features could potentially alter the existing drainage pattern of the site or area and would generate new impervious surfaces. Evaluation of impacts related to the project potential alteration of drainage patterns of the site will be evaluated in the EIR/EIS.
- (e) The project would increase impervious surfaces on-site, which could substantially increase stormwater runoff. The applicant would be required to prepare a drainage plan to address potential stormwater run-off impacts. Further analysis is required to identify appropriate mitigation/design measures and evaluate their effectiveness. Evaluation of the project's potential to impact capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff will be evaluated in the EIR/EIS.
- (f) Project construction activities (such as grading of access roads) could potentially degrade water quality through erosion and subsequent sedimentation of streams. Additionally, accidental release of potentially harmful materials, such as engine oil, diesel fuel, turbine lubricant, and cement slurry, could degrade water quality of nearby streams. This potential impact will be further evaluated in the EIR/EIS.



- (g) The project does not include housing. Therefore, no impact would occur; however, this issue will be discussed in the EIR/EIS.
- (h) Portions of the project site are located within an A Zone (100-year) Flood Hazard Area as delineated on the Federal Emergency Management Agency's (FEMA) Digital Flood Insurance Rate Maps (DFIRM). The project requests the overlay of the Floodplain (FP) Combining District over portions of the project located within the A Zone. The purpose of the FP Combining District is to protect public health and safety and minimize property damage by designating areas that are potentially subject to flooding by establishing reasonable restrictions on land use. While the project does not include the placement of structures within a 100-year flood hazard zone, the potential for project structures to redirect or impede flood flows within a floodplain zone will be evaluated in the EIR/EIS.
- (i) The project would not be not located within an area that is subject to flooding due to failure of a levee or dam. However, portions of the project site are located within an A Zone (100-year) Flood Hazard Area as delineated on the Federal Emergency Management Agency's (FEMA) Digital Flood Insurance Rate Maps (DFIRM). Therefore, the potential for project structures to be impacted by flood flows within this floodplain zone will be evaluated in the EIR/EIS.
- (j) The project is not located near an ocean or enclosed body of water, and would not be subject to inundation by seiche or tsunami. Mudflows are a type of mass wasting or landslide, where earth and surface materials are rapidly transported downhill under the force of gravity. Mudflow events are caused by a combination of factors, including soil type, precipitation, and slope. Mudflow may be triggered by heavy rainfall that the soil is not able to sufficiently drain or absorb. As a result of this super-saturation, soil and rock materials become unstable and eventually slide away from their existing location. The potential for project structures to be inundated by mudflow will be further evaluated in the EIR/EIS.



LA	AND USE AND PLANNING. Would the proj	Potentially Significant Impact ect:	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
a.	Physically divide an established community?	$\boxtimes$			
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	$\boxtimes$			
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	$\boxtimes$			

- (a) The project is not within or adjacent to any established community. However, as the project would involve a change in zoning designations and new project features, this potential impact will be evaluated in the EIR/EIS.
- (b) The project area is within the boundaries of the Kern County General Plan (KCGP) and the Mojave Specific Plan (MSP). The KGCP and MSP designate the site as: Map Code 1.1 (State or Federal Land), Map Code 8.3 (Extensive Agriculture), Map Code 8.4 (Mineral and Petroleum), and Map Code 8.5 (Resource Management). The site is also designated with the following combining hazard overlays: Map Code 2.4 (Steep Slope) and Map Code 2.5 (Flood Hazard). The Kern County Zone Districts in the project area are: A-1 (Limited Agriculture), and E (20) (Estate, 20 acres).

Under the project, a portion of the project area would be changed from the existing zone classifications to the A WE (Exclusive Agriculture, Wind Energy Combining) District. The WE Combining District contains specific development standards and conditions that apply to all construction and siting of wind turbines in this zone. Consistency of the project with the policies of the Kern County General Plan and any other applicable land use plan, policy, or regulation will be evaluated in the EIR/EIS.

(c) The project is not within the boundaries of any adopted habitat conservation plan or natural community conservation plan. However, the project is encompassed in the area covered by the California Desert Conservation Area Plan and its amendment, the West Mojave Plan. Consistency with these and any other or approved local, regional, or State habitat conservation plans will be evaluated in the EIR/EIS.



		Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
<u>M</u> ]	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	$\boxtimes$			
b.	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	$\boxtimes$			

(a)(b) Kern County is known to contain numerous mining operations that extract a variety of materials, including sand and gravel, stone, gold, dimensional stone, limestone, clay, shale, gypsum, pumice, decorative rock, silica, and specialty sand. It is anticipated that mineral resources occur within the project area given its designation under the Kern County General Plan as Mineral and Petroleum, which applies to areas that contain producing or potentially producing petroleum fields, natural gas, or geothermal resources, or mineral deposits of statewide significance. The project may potentially preclude access for extraction of valuable or locally-important mineral resources if present within the project area. Therefore, these potential impacts will be further evaluated in the EIR/EIS.



		Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
NO	<b>DISE.</b> Would the project result in:	Impact	Miligateu	Impact	Impact
a.	Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	$\boxtimes$			
b.	Exposure of persons to, or generation of, excessive ground borne vibration or ground borne noise levels?	$\boxtimes$			
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	$\boxtimes$			
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	$\boxtimes$			
e.	For a project located within the Kern County Airport Land Use Compatibility Plan, would the project expose people residing or working in the project area to excessive noise levels?				
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?			$\boxtimes$	

- Land uses determined to be "sensitive" to noise as defined by the Kern County General Plan include residential areas, schools, convalescent and acute care hospitals, parks and recreational areas, and churches. The nearest sensitive receptors to the project are residences and recreational areas within and adjacent to the project boundaries. Implementation of the project would result in a change in the zone classification on various properties on the project site to include the WE Combining District. This classification requires that noise levels associated with wind turbine operations do not exceed 45 dBA (A-weighted decibels) for more than five minutes out of any one hour time period or 50 dBA for any period of time if the turbine is within 50 feet of any existing residence, school, hospital, church, or public library (Kern County Ordinance 19.64.140 (J)). A noise analysis will be included in the EIR/EIS to determine the project's consistency with the applicable noise regulations and provisions of the Kern County General Plan and Zoning Ordinance.
- (b) Ground-borne vibration and ground-borne noise could originate from earth movement during the construction phase of the project as well as from operation and maintenance of the facilities. The project would be expected to comply with all applicable noise regulations and requirements for long-term operation, as well as with measures to reduce excessive ground-borne vibration and noise to ensure that the project would not expose persons or structures to excessive ground-borne vibration. However, due to potential vibration impacts during construction, further analysis of ground-borne vibration and ground-borne noise will be included in the EIR/EIS.

# KERN COUNTY PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT ALTA EAST WIND PROJECT



- (c) Turbine operation, maintenance related traffic, and general maintenance activities associated with the project would introduce permanent noise sources to the project area. Construction activity would also increase ambient noise levels for a temporary period of time during construction. Further analysis of ambient noise levels and the project's potential impact on those levels will be included in the EIR/EIS.
- (d) Heavy equipment use during construction would cause a temporary or periodic increase in ambient noise levels. Project construction activity would increase ambient noise levels in the immediate area above existing levels for 9 to 12 months. Temporary or periodic increases in ambient noise levels caused by construction activities could be reduced with the incorporation of mitigation measures. Project-related construction noise levels will be quantified and evaluated in the EIR/EIS.
- (e) The project area is located approximately 2.5 miles from the Mojave Air and Space Port, 10 miles from the California City Municipal Airport, 12.5 miles from the Mountain Valley Airport and 13 miles from the Tehachapi Municipal Airport. Aviation related noise hazards for people residing or working in the project area are expected to be less than significant with respect to the project's proximity to a public or military use airport. However, because this project is located within the sphere of influence of an airport identified in the Kern County Airport Land Use Compatibility Plan, the EIR/EIS will discuss this issue.
- (f) The project is not located within 5 miles of a private airstrip; therefore, implementation of the project is not expected to expose individuals working in the project area to excessive noise levels generated from private airstrips. Nevertheless, the EIR/EIS will discuss this issue.



		Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
PC	<b>PULATION AND HOUSING.</b> Would the pr	oject:			
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	$\boxtimes$			
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	$\boxtimes$			
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	$\boxtimes$			

(a) Typical established local thresholds of significance for housing and population growth pursuant to the State CEQA Guidelines, Section 15064.7 include effects that would induce substantial growth or concentration of a population beyond County projections, alter the location, distribution, density, or growth rate of the population beyond that projected in the Housing Element, result in a substantial increase in demand for additional housing, or create a development that significantly reduces the ability of the County to meet housing objectives set forth in the General Plan Housing Element.

Construction of the project is expected to require an average of 80 workers with a peak of 262 workers over a three week period during construction, which would be a minimal increase in employment over the 9-12 month construction period given the project area's existing population. Construction workers are expected to travel to the site from various locations throughout southern California, and the number of workers expected to relocate to the surrounding area is not expected to be substantial. Operation of the project would also require up to 15 full-time or part-time staff. The EIR/EIS will contain analysis to determine the project's potential for directly or indirectly inducing any new population or the development of housing or businesses.

Although the project would produce additional electricity, it is intended to meet the demand for energy that is already projected based on growth in communities around California. While the project's electricity would replace electricity generated by fossil fuels, thereby contributing to California's renewable energy goals, the production of additional electricity may indirectly be growth inducing. These issues will be analyzed within the EIR/EIS.

(b)/(c) Although not anticipated, the EIR/EIS will identify and analyze any impacts to identified residential or commercial buildings requiring relocation. Should any occupied buildings need to be relocated, the EIR/EIS will contain appropriate mitigation. Additionally, the project's potential for displacement of any persons will be evaluated in the EIR/EIS.



		Potentially	Potentially Significant Impact	Less Than	
		Significant Impact	Unless Mitigated	Significant Impact	No Impact
PU	BLIC SERVICES.			_	
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services:				
	i) Fire protection?	$\boxtimes$			
	ii) Police protection?	$\boxtimes$			
	iii) Schools?	$\boxtimes$			
	iv) Parks?	$\boxtimes$			
	v) Other public facilities?	$\boxtimes$			

(a) The Kern County Fire Department provides fire suppression and emergency medical services to the project area. The Mojave Station, located 3.5 miles southeast of the project site at 1953 SR-58 in Mojave, would be the primary fire station to service the project. The majority of the project site is within a State Responsibility Area (SRA), and CAL FIRE implements wildfire planning and protection for the SRA. Construction and operation activities may result in increased risk of wildfire, which could impact firefighting capacity in the area. The potential impact on fire services from construction in a SRA area and operation of the project is therefore potentially significant and will be evaluated in the EIR/EIS.

The Kern County Sheriff's Department provides police protection services to the project area. The Mojave Substation, located 3.5 miles southeast of the project site at 1771 SR-58 in Mojave, would be the primary police substation to service the project area. During construction, on-site security would be provided. In addition, temporary construction fencing with gated site access would be installed in accordance with County regulations to assure security and personnel safety during construction. Where appropriate, construction fencing may be retained for permanent fencing and would be constructed to meet standards for permanent installations. While security and fencing would minimize the need for police surveillance and response, the project's impacts on sheriff services and existing capacities is potentially significant and will be evaluated in the EIR/EIS.

Construction of the project is expected to require an average of 80 workers with a peak of 262 workers over a three week period during construction, which would be a minimal increase in employment over the 9-12 month construction period given the project area's existing population. Construction workers are expected to travel to the site from various locations throughout southern California, and the number of workers expected to relocate to the surrounding area is not expected

# KERN COUNTY PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT ALTA EAST WIND PROJECT



to be substantial. Operation of the project would also require up to 15 full-time or part-time staff. However, further analysis is required to determine the project's potential for directly or indirectly inducing new population growth. The EIR/EIS will analyze any population increase that would be experienced during construction and operation of the project that could result in additional demand for school facilities.

As further analysis is required to determine the project's potential for directly or indirectly inducing population growth, the EIR/EIS will analyze any population increase that would be experienced during the construction phase and operation of the project that could result in additional demand for recreational facilities. The project is expected to result in less than significant impacts on public services, such as post office and library services. Nevertheless, all impacts on public services will be evaluated in the EIR/EIS.



RI	ECREATION.	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	$\boxtimes$			
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	$\boxtimes$			

- (a) Construction of the project is expected to require an average of 80 workers with a peak of 262 workers over a three week period during construction, which would be a minimal increase in employment over the 9-12 month construction period given the project area's existing population. Construction workers are expected to travel to the site from various locations throughout southern California, and the number of workers expected to relocate to the surrounding area is not expected to be substantial. Operation of the project would also require up to 15 full-time or part-time staff. The temporary increase of population during construction that might be caused by an influx of workers would not likely result in an increase in the use of County parks, private golf courses, the Pacific Crest Trail (PCT), or other recreation facilities that would deteriorate the subject recreational facilities. However, further analysis is required to determine the project's potential for directly or indirectly inducing new population. The EIR/EIS will analyze any population increase that would be experienced during construction and operation of the project that could result in additional demand for recreational facilities.
- (b) The project does not include new recreational facilities or require construction or expansion of recreational facilities. However, a portion of the PCT passes within one mile of the northwestern portion of the project area. The PCT is an international hiking trail that extends from Mexico to Canada through California, Oregon and Washington. Impacts to this trail and other recreational facilities as well as wilderness areas, including potential preclusion of access and degradation of value, will be further evaluated in the EIR/EIS.



		Potentially	Potentially Significant Impact	Less Than	
		Significant Impact	Unless Mitigated	Significant Impact	No Impact
TR	ANSPORTATION/TRAFFIC. Would the p	roject:			
a.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	$\boxtimes$			
b.	Exceed, either individually or cumulatively, a Level of Service standard established by the county congestion management agency or adopted County threshold for designated roads or highways? Specifically, would implementation of the project cause the Level of Service (LOS) for roadways and/or intersections to decline below the following thresholds or further degrade already degraded segment(s):				
	i. Metropolitan Bakersfield General Plan LOS "C"				
	ii. Kern County General Plan LOS "D"	$\boxtimes$			
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e.	Result in inadequate emergency access?	$\boxtimes$			
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	$\boxtimes$			



(a) Both SR-14 and SR-58 provide regional access to the project area. Project-related traffic would use access roads entering the project from the west or the east. Construction of the project will take approximately 9 to 12 months. Vehicle trips generated by construction workers traveling to the site as well as equipment and materials deliveries would add vehicle trips to the area roadway system. Delivery of construction materials would require a number of oversize vehicle trips that may travel at slower speeds than existing traffic and, due to their size, may intrude into adjacent travel lanes. These oversize trips may decrease the existing level of service (LOS) on area freeways, roadways and intersections. Additionally, the total number of vehicle trips associated with all construction-related traffic (including construction workers) could temporarily increase daily traffic volumes traveling on local roadways and intersections. Furthermore, stringing activities required for transmission line infrastructure may require temporary lane closures that may result in temporary traffic delays on affected roadways. The EIR/EIS will evaluate these potential impacts on the local roadway system from construction related vehicle trips.

Once constructed, the project is expected to employ a relatively small number of staff and generate minimal daily trips to maintain the project. However, the potential impact of project operational traffic on the area roadway system will be evaluated in the EIR/EIS.

- (b) (i) The project site is located approximately 40 miles southeast of the metropolitan Bakersfield area. Construction and operation of the project would result in increased vehicle trips on roadways in the project area; however, these trips are not expected to be focused within or result in a substantial number of trips on roadways in the metropolitan Bakersfield area. However, potential impacts to Bakersfield metropolitan area roadways will be discussed in the EIR/EIS.
  - (ii) Construction of the project would generate construction trips and may require roadway lane closures, which could temporarily increase the daily traffic volumes or delays on local roadways and intersections. Operation of the project would also generate trips on local roadways. The potential impacts of these conditions on LOS of area roadways will be evaluated in the EIR/EIS.
- (c) The project area is located approximately 2.5 miles from the Mojave Air and Space Port, 10 miles from the California City Municipal Airport, 12.5 miles from the Mountain Valley Airport and 13 miles from the Tehachapi Municipal Airport. Due to the proximity of these airport facilities and the heights of project components, the EIR/EIS will evaluate potential impacts related to aviation safety hazards and compliance with the Kern County ALUCP, FAA 7460, and military airspace requirements.
- (d) A number of existing dirt roads within the project site would be graded, widened, and compacted to provide adequate construction and maintenance access to project facilities. New access roads would be constructed where required. Because all site access roadways would be private and gated to restrict public use, all modifications to existing onsite access roads and any new access roads created are not expected to result in an increase to public transportation hazards due to design or incompatible use. However, because all project access roads would require Access Road Design and Encroachment Permits from both Kern County and the California Department of Transportation, the project's compliance with regulations pertaining to access road modifications and construction will be evaluated in the EIR/EIS.
- (e) Construction of the project would generate construction trips and potential roadway lane closures that could temporarily increase the daily traffic volumes or delays on local roadways and intersections, thereby impeding emergency access. The potential for project-related traffic to result in inadequate emergency access will be evaluated in the EIR/EIS.



(f) Construction of the project would generate construction trips and potential roadway lane closures that could temporarily disrupt bicycle traffic on local roadways. However, due to the rural nature of the project site area, no bus stops or designated bicycle lanes exist on the roadways likely to be used during project construction and operation. There is sufficient space on the project site to provide adequate parking. However, to ensure project compliance to the General Plan policies supporting alternative transportation, the EIR/EIS will discuss how the project's traffic impacts can be mitigated through ride sharing and limiting project-generated trips.



		<b>.</b>	Potentially Significant	¥ (D)	ı	
		Potentially Significant Impact	Impact Unless Mitigated	Less Than Significant Impact	No Impact	
UI	TILITIES AND SERVICE SYSTEMS. Would	d the project:				
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?					
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	$\boxtimes$				
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	$\boxtimes$				
e.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?					
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	$\boxtimes$				
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	$\boxtimes$				

- (a) The project would generate a minimal volume of wastewater. During construction and operation, wastewater from the concrete batch plant and that associated with other construction activities would be contained within portable facilities and disposed of at an approved site. During operation, the project would not generate substantial volumes of wastewater due to the minimal number of full-time or part-time employees. Impacts exceeding wastewater treatment requirements are expected to be less than significant; however, the EIR/EIS will consider these issues more thoroughly.
- (b) The project may require the construction of a septic system or leach lines; however, wastewater generation during construction and operation is expected to be limited due to the minimal employment associated with project operation. Water would be provided by a well or other water service (to serve non-potable demands) and by onsite well or bottled drinking water (to serve potable needs). Water that is needed for construction, such as for dust suppression and concrete mixing, would either be supplied from a new well on the project site or be trucked in from nearby municipalities. Since the project would provide its own water source, it would not impact existing water



supply systems. However, the project would still require construction of the facilities listed above. The EIR/EIS will evaluate the project's compliance with all applicable local, State, and federal water and wastewater requirements and best management practices incorporated into construction of these project features.

- (c) Although the project would create a small amount of additional impervious surface and may require a small amount of imported water for concrete mixing and dust suppression during construction, these changes are not expected to substantially increase the amount of stormwater runoff. The project area is drained by natural stream channels and does not rely on constructed stormwater drainage systems. As any new impervious surface and grading of access roads have the potential to alter the pattern and concentration of runoff; the EIS/EIS will provide further analysis to determine the need for any appropriate stormwater mitigation/design measures.
- (d) Drinking water would be provided by bottled water or onsite well. However, water that is needed for construction, such as for dust suppression and concrete mixing, would either be supplied from a new on-site well or be trucked in from nearby municipalities. A Water Supply Assessment will be prepared to analyze groundwater supplies and recharge in the project area. Therefore, the issue of new or expanded entitlements will be evaluated in the EIR/EIS.
- (e) The project would include construction of a limited septic system or leach lines to accommodate on-site operations facilities if required by the Kern County Environmental Health Services Division. There would be no substantial wastewater flows to treatment providers and no impacts to existing wastewater treatment facilities. Nevertheless, this issue will be evaluated in the EIR/EIS.
- (f) The project is not expected to generate a significant amount of waste that would exceed the capacity of local landfills. Materials brought to the project site would be used to construct facilities and few residual materials are expected. Non-hazardous construction refuse and solid waste would be disposed of at a local landfill, while any hazardous waste generated during project construction would be disposed of at an approved location. However, as the project would generate some level of waste during construction, the EIR/EIS will evaluate if the amount of solid waste generated by the project site would exceed the capacity of local landfills needed to accommodate the waste.
- (g) The project would generate solid waste during construction and operation, thus requiring the consideration of waste reduction and recycling measures. The 1989 California Integrated Waste Management Act (AB 939) requires Kern County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the project design. The need for mitigation measures to confirm that the project will comply with the 1989 California Integrated Waste Management Act and the 1991 California Solid Waste Reuse and Recycling Access Act of 1991, as amended will be evaluated in the EIR/EIS.



	Potentially	Potentially Significant Impact	Less Than	
	Significant Impact	Unless Mitigated	Significant Impact	No Impact
ANDATORY FINDINGS OF SIGNIFICAN	CE			
Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				
	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?  Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?  Does the project have environmental effects which will cause substantial adverse effects	ANDATORY FINDINGS OF SIGNIFICANCE  Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?  Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?  Does the project have environmental effects which will cause substantial adverse effects	ANDATORY FINDINGS OF SIGNIFICANCE  Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?  Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?  Does the project have environmental effects which will cause substantial adverse effects  Significant Impact Unless Mitigated  Impact Unless Mitigated  ANDATORY FINDINGS OF SIGNIFICANCE     Impact Unless Mitigated    Impact Unless Mitigated   Impact Unless Mitigated   Impact Unless Mitigated   Impact Unless Mitigated   Impact Unless Mitigated   Impact Unless Mitigated   Impact Unless Mitigated   Impact Unless Mitigated   Impact Unless Mitigated   Impact Unless Mitigated   Impact Unless Mitigated   Impact Unless Mitigated   Impact Inpact Network Mitigated   Impact Network Mitigated   Impact Network Mitigated   Impact Network Mitigated   Impact Network Mitigated Ne	ANDATORY FINDINGS OF SIGNIFICANCE  Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?  Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, and the effects of other current projects, and the effects of probable future projects have environmental effects which will cause substantial adverse effects    Comparison   California   Califo

- (a) Impacts to biological resources are currently unknown. Biota studies for the project are currently being conducted. The EIR/EIS's biological resources section will discuss specific project impacts on plants and wildlife including avian species. The EIR/EIS will also evaluate the project's contribution to cumulative biological resources impacts and propose mitigation that will reduce the impacts.
- (b) The project has the potential to contribute to cumulative impacts to aesthetics, agricultural resources, air quality, biological resources, greenhouse gas emission, hydrology, land use and planning, noise, public services, and transportation and traffic. The EIR/EIS will evaluate the project's contribution to cumulative impacts in these and other areas as further impacts are identified.
- (c) Although there may be significant air quality impacts during construction, the long term air quality impacts could be beneficial if fossil fuel use is reduced. However, the health impacts from project-related and cumulative contribution to air quality impacts will be evaluated in the EIR/EIS.

## **APPENDIX B**

# BLM Notice of Intent (NOI)



Diego. An additional 15 acres would be temporarily disturbed during construction.

The Project would be a 15 to 18 MW (with peak capacity of 20 MW) project and would include photo-voltaic (PV) arrays, inverters, transformers, and a maintenance building. The project would connect to the existing SDG&E Imperial Valley Substation (IVS), which is located to the Project's immediate north via a buried 12.47 kilovolt cable. The project would not require any expansion of the IVS, nor any upgrades to the existing transmission lines exiting the substation.

The purpose of the public scoping process is to determine relevant issues that will influence the scope of the environmental analysis, including alternatives, and guide the process for developing the EIS. At present, the BLM has identified the following preliminary issues: Air quality, biological resources, cultural resources, water resources, geological resources and hazards, land use, noise, paleontological resources, socioeconomics, traffic and transportation, and visual resources. An updated inventory of wilderness characteristics will be used to determine whether lands with wilderness characteristics are present in the project area and to analyze impacts associated with these resources.

Pursuant to the CDCA Plan, sites associated with power generation or transmission not identified in the CDCA Plan will be considered through the plan amendment process to determine the suitability of the sites for renewable energy development. Since the Project site was not previously identified as suitable, authorization of the Project would require amendment of the CDCA Plan. By this notice, the BLM is complying with requirements in 43 CFR 1610.2(c) to notify the public of potential amendments to land use plans predicated on the findings in the EIS. If a Plan Amendment is necessary, the BLM will integrate the land use planning process with the NEPA process for the Project. A preliminary list of the potential planning criteria that will be used to help guide and define the scope of the plan amendment process include:

- The plan amendments will be completed in compliance with FLPMA, NEPA, and all other relevant Federal laws, executive orders, and BLM policies;
- Existing, valid plan decisions will not be changed and any new plan decisions will not conflict with existing plan decisions; and
- The plan amendment(s) will recognize valid existing rights.

The BLM will also use and coordinate the NEPA commenting process to help fulfill the public involvement process under Section 106 of the National Historic Preservation Act (16 U.S.C. 470(f) as provided for in 36 CFR 800.2(d)(3). Native American Tribal consultations will be conducted in accordance with policy, and Tribal concerns will be given due consideration. Federal, State, and local agencies, along with Tribes and other stakeholders that may be interested or affected by the BLM's decision on this project, are invited to participate in the scoping process and, if eligible, may request or be requested by the BLM to participate as cooperating agencies.

In connection with its processing of SDG&E's application, the BLM is also segregating, under the authority contained in 43 CFR 2091.3-1(e) and 2804.25(e), subject to valid existing rights, the public lands within the Project application area from appropriation under the public land laws, including the Mining Law of 1872, as amended, but not the Mineral Leasing the Material Sales Acts, for a period of 2 years from the date of publication of this notice. The public lands contained within this temporary segregation total approximately 240 acres and are described as follows:

#### San Bernardino Meridian

T. 16½ S., R. 12 E., Sec. 3, E½SW¼, SE¼.

The BLM has determined that this temporary segregation is necessary to ensure the orderly administration of the public lands by maintaining the status quo while it processes SDG&E's ROW application for the above described lands. The segregation period will terminate and the lands will automatically reopen to appropriation under the public land laws, including the Mining Law, if one of the following events occurs: (1) The BLM issues a decision granting, granting with modifications, or denying SDG&E's ROW application; (2) publication of a **Federal Register** notice terminating this segregation; or (3) there is no further administrative action at the end of the segregation provided for in the Federal Register notice initiating the segregation, whichever occurs first. Any segregation made under this authority is effective only for a period of up to 2 years.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

**Authority:** 40 CFR 1501.7; 43 CFR 1610.2, 2091.3–1(e), and 2804.25(e).

#### Thomas Pogacnik,

Deputy State Director, California.
[FR Doc. 2011–17718 Filed 7–14–11; 8:45 am]
BILLING CODE 4310–40–P

#### **DEPARTMENT OF THE INTERIOR**

#### **Bureau of Land Management**

[LLCAD05000, L51010000.LVRWB11B4520.FX0000]

Notice of Intent To Prepare a Joint Environmental Impact Statement and Environmental Impact Report for the Proposed Alta East Wind Project, and Possible Land Use Plan Amendment, Kern County, CA

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Notice of Intent.

**SUMMARY:** In compliance with the National Environmental Policy Act of 1969, as amended (NEPA), the Federal Land Policy and Management Act of 1976, as amended (FLPMA), and the California Environmental Quality Act, the Bureau of Land Management (BLM) Ridgecrest Field Office, Ridgecrest, California, together with the County of Kern, California, intend to prepare a joint Environmental Impact Statement (EIS)/Environmental Impact Report (EIR), which may include an amendment to the California Desert Conservation Area (CDCA) Plan (1980 as amended), related to Alta Windpower Development LLC's (Applicant or AWD) right-of-way (ROW) authorization request for the Alta East Wind Project (Project), a 300-megawatt (MW) wind farm. By this notice BLM and Kern County are announcing the beginning of the scoping process to identify issues and solicit public comments on the EIS/ EIR and proposed plan amendment. By this notice the BLM is also segregating, subject to valid existing rights, approximately 2,083 acres of public lands from appropriation under the public land laws, including the Mining Law of 1872, as amended, but not from leasing under the mineral leasing laws or disposal under the mineral material laws, for a period of 2 years from the date of publication of this notice for the purpose of processing AWD's ROW authorization request.

DATES: This notice initiates: (1) The public scoping process for the EIS/EIR and possible plan amendment; and (2) the 2 year segregation period for the public lands within the AWD ROW application area. Comments on issues related to the EIS and possible plan amendment may be submitted in writing until August 15, 2011. The date(s) and location(s) of any scoping meetings will be announced at least 15 days in advance through local media, newspapers, and the BLM Web site at: http://www.blm.gov/ca/st/en/fo/ cdd.html. In order to be fully addressed in the Draft EIS/EIR, all comments must be received prior to the close of the scoping period or 15 days after the last public meeting, whichever is later. We will provide additional opportunities for public participation upon publication of the Draft EIS/EIR. The segregation of the public lands is effective as of July 15, 2011. The segregation will terminate if one of the following events occurs: (1) The BLM issues a decision granting, granting with modifications, or denying AWD's ROW authorization request; (2) publication of a Federal Register notice terminating this segregation; or (3) no further administrative action occurs before the end of this segregation on July 15, 2013. ADDRESSES: You may submit comments on issues and alternatives related to the Alta East Wind Project Draft EIS/EIR and CDCA Plan amendment by any of the following methods:

- Web site: http://www.blm.gov/ca/st/en/fo/cdd.html.
  - E-mail: altaeast@blm.gov.
  - Fax: (951) 697-5299.
- Mail: ATTN: Jeffery Childers, Project Manager, BLM California Desert District Office, 22835 Calle San Juan de Los Lagos, Moreno Valley, California 92553–9046.

Documents pertinent to this proposal may be examined at the BLM California Desert District Office.

FOR FURTHER INFORMATION CONTACT: For further information and/or to have your name added to our mailing list, contact Jeffery Childers; telephone (951) 697-5308; address BLM California Desert District Office, 22835 Calle San Juan de Los Lagos, Moreno Valley, California 92553-9046; e-mail jchilders@blm.gov. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

**SUPPLEMENTARY INFORMATION:** AWD has requested a ROW authorization to construct, operate, maintain, and decommission the 300-MW Alta East Project. The Project is proposed to be located on approximately 3,200 acres on the north and south sides of State Route 58 in southeastern Kern County, California. The proposed Project area is approximately 3 miles northwest of the Town of Mojave and approximately 11 miles east of the City of Tehachapi. The project would include wind turbines, access roads, and energy collection lines on 3,200 acres, of which 2,083 acres are on public land under the jurisdiction of the BLM and 1,117 acres of private land under the jurisdiction of Kern County. Approximately 681 acres would need to be re-zoned to be consistent with the Kern County Zoning Ordinance Wind Energy (WE) Combining District. The purpose of the public scoping process is to determine relevant issues that will influence the scope of the environmental analysis, including alternatives, and guide the process for developing the Draft EIS/EIR and CDCA Plan amendment. At present, the BLM has identified the following preliminary issues: Air quality and greenhouse gas emissions, biological resources including special status species, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, noise, recreation, traffic, visual resources, lands with wilderness characteristics, cumulative effects, and areas with high potential for renewable energy development. Pursuant to the CDCA Plan, sites associated with power generation or transmission not identified in the CDCA Plan will be considered through the plan amendment process to determine the suitability of the sites for renewable energy development. Since the proposed Project site was not previously identified as suitable, authorization of the Project will require amendment of the CDCA Plan. By this notice, the BLM is complying with requirements in 43 CFR 1610.2(c) to notify the public of potential amendments to land use plans predicated on the findings in the EIS/ EIR. If a land use plan amendment is necessary, the BLM will integrate the land use planning process with the NEPA process for the project. A preliminary list of the potential planning criteria that will be used to help guide and define the scope of the plan amendment process include:

• The plan amendments will be completed in compliance with the FLPMA, NEPA, and all other relevant Federal laws, executive orders, and BLM policies;

- Existing, valid plan decisions will not be changed and any new plan decisions will not conflict with existing plan decisions; and
- The plan amendment(s) will recognize valid existing rights. The BLM will also use and coordinate the NEPA commenting process to satisfy the public involvement process for Section 106 of the National Historic Preservation Act (16 U.S.C. 470(f) as provided for in 36 CFR 800.2(d)(3). Native American tribal consultations will be conducted in accordance with policy and tribal concerns will be given due consideration, including impacts on Indian trust assets. Federal, State, and local agencies, along with tribes and other stakeholders that may be interested in or affected by the BLM's decision on this project, are invited to participate in the scoping process and, if eligible, may request or be requested by the BLM to participate in the development of the environmental analysis as a cooperating agency.

In connection with its processing of AWD's application, the BLM is also segregating, under the authority contained in 43 CFR 2091.3-1(e) and 43 CFR 2804.25(e), subject to valid existing rights, the public lands within the Project application area from appropriation under the public land laws including the Mining Law of 1872, as amended, but not the Mineral Leasing or the Material Sales Acts, for a period of 2 years from the date of publication of this notice. The public lands contained within this temporary segregation total approximately 2,083 acres and are described as follows:

#### **Mount Diablo Meridian**

T. 32 S., R. 35 E., Sec. 26, SW<sup>1</sup>/<sub>4</sub> and W<sup>1</sup>/<sub>2</sub>SE<sup>1</sup>/<sub>4</sub>; Secs. 28, 32, and 34; and

#### San Bernardino Meridian

T. 12 N., R. 13 W., sec. 34.

The areas described aggregate approximately 2,083 acres in Kern County.

The BLM has determined that this temporary segregation is necessary to ensure the orderly administration of the public lands by maintaining the status quo while it processes AWD's ROW application for the above described lands. The temporary segregation period will terminate and the lands will automatically reopen to appropriation under the public land laws, including the Mining Law, if one of the following events occurs: (1) The BLM issues a decision granting, granting with modifications, or denying AWD's ROW

authorization request; (2) Publication in the **Federal Register** of a notice terminating this segregation; or (3) No further administrative action occurs at the end of this segregation. Any segregation made under this authority is effective only for a period of up to 2 years.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so

**Authority:** 40 CFR 1501.7; 43 CFR 1610.2, 2091.3–1(e), and 2804.25(e)).

#### Thomas Pogacnik,

Deputy State Director, California. [FR Doc. 2011–17717 Filed 7–14–11; 8:45 am] BILLING CODE 4310–40–P

#### DEPARTMENT OF THE INTERIOR

# Bureau of Land Management [LLNM01000 L16100000 DO0000]

Notice of Intent To Prepare a Resource Management Plan Amendment for the Glade Run Recreation Area, Farmington Field Office, New Mexico, and Associated Environmental Assessment

AGENCY: Bureau of Land Management,

**ACTION:** Notice of Intent.

Interior.

**SUMMARY:** In compliance with the National Environmental Policy Act of 1969 (NEPA), as amended, and the Federal Land Policy and Management Act of 1976 (FLPMA), as amended, the Bureau of Land Management (BLM) Farmington Field Office (Field Office), Farmington, New Mexico, intends to prepare a Resource Management Plan (RMP) amendment to the 2003 Farmington RMP with an associated Environmental Assessment (EA) to address recreation and travel management in the Glade Run Recreation Area (the Glade). By this Notice, the Field Office is announcing the beginning of the scoping process to solicit public comments and identify

**DATES:** This Notice initiates the public scoping process for the RMP amendment/EA. Comments on issues and planning criteria may be submitted 30 days from the date of publication of

this Notice in the Federal Register (the scoping period). The date(s) and location(s) of any scoping meeting(s) will be announced at least 15 days in advance through the local news media, mailings to interested individuals, and on the BLM Field Office Web site at: <a href="http://www.blm.gov/nm/st/en.html">http://www.blm.gov/nm/st/en.html</a>. In order to be included in the Draft RMP amendment/EA, all comments must be received prior to the close of the scoping period or 30 days after the last public meeting, whichever is later.

The BLM will provide additional opportunities for public participation and comment upon publication of the Draft RMP amendment/EA.

ADDRESSES: You may submit comments on issues and planning criteria related to the Farmington Field Office Glade Run Recreation Area RMP amendment/ EA by any of the following methods:

- Web site: http://www.blm.gov/nm/st/en.html.
- E-mail: FFO Comments@blm.gov.
- *Fax:* 505–599–8999 Attention: Outdoor Recreation Planner.
- Mail: 1235 La Plata Highway,
   Farmington, New Mexico 87401,
   Attention: Outdoor Recreation Planner.

Public comments, maps and other information related to the Glade RMP amendment/EA may be examined at the Field Office.

FOR FURTHER INFORMATION CONTACT: For further information and/or to have your name added to our mailing list, contact Janelle Alleman, Outdoor Recreation Planner, telephone: 505-599-8944; address: 1235 La Plata Highway, Farmington, New Mexico 87401; or by e-mail at FFO Comments@blm.gov. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

SUPPLEMENTARY INFORMATION: The BLM Farmington Field Office, Farmington, New Mexico, intends to prepare an RMP amendment/EA to address recreation and travel management decisions in the Glade. The Glade encompasses 21,544 acres of which 17,935 acres are Federal lands. The remaining acres consist of State of New Mexico and private lands. The planning area is located in San Juan County, New Mexico. The purpose of the public scoping process is to determine relevant issues that will influence the scope of the RMP amendment/EA, including alternatives,

and will help to guide the planning process.

New forms of motorized vehicles and technology, population growth, increasing user conflicts, and related developments have out-paced guidance and decisions in the current recreation and travel management plan for the Glade, which was approved in 1996. To address these developments, the RMP amendment/EA will consider proposals to amend the RMP to make changes in off-highway vehicle (OHV) area designations (43 CFR 8342.2). OHV area designations are land use allocations that classify areas of public lands as open, limited, or closed to motorized travel. The RMP amendment/EA will also consider a proposal to designate the Glade as a Special Recreation Management Area (SRMA). SRMA designations recognize specified public lands where recreation opportunities and recreation settings are the predominant land use planning focus and are managed through the land use planning process.

In addition, this planning effort will develop management alternatives that include specific activity planning targeted at identifying a travel and transportation network of routes for specified uses within the planning area.

The BLM anticipates the following planning issues (43 CFR 1610.2(c)(3)): (1) How to best address conflicts between recreational users? (2) What is an appropriate balance in providing for the different kinds of recreation uses and opportunities? (3) Is there an opportunity for a Recreation & Public Purpose lease within the planning area? and (4) How can BLM best promote and address public safety?

The BLM will use an interdisciplinary approach to develop the plan in order to consider the variety of resource issues and concerns identified. Specialists with expertise in the following disciplines will be involved in the planning process: Rangeland management, minerals and geology, forestry, outdoor recreation, archaeology, paleontology, wildlife and fisheries, lands and realty, hydrology, soils, sociology, and economics.

Proposed planning criteria include the following:

- 1. The RMP amendment/EA will comply with FLPMA, NEPA, and all other applicable laws, regulations, and policies;
- 2. For program-specific guidance for decisions at the land use planning level, the process will follow the BLM's policies in the Land Use Planning Handbook, H–1601–1;

# **APPENDIX C**

# **Scoping Meeting Materials**

# ALTA EAST WIND PROJECT SCOPING MEETING

# KERN COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT and BUREAU OF LAND MANAGEMENT

Mojave Veterans Building Room 1 15580 O Street Mojave, CA

### August 4, 2011 – 7:00 p.m. to 9:00 p.m.

### Meeting Schedule

5:00 p.m. – Introductions from Kern County and Bureau of Land Management

5:10 p.m. – CEQA/NEPA Scoping Process

5:20 p.m. – Alta East Wind Project Description

5:30 p.m. – Public Comment Period Begins (a court reporter is present)

6:30 p.m. – Question and Answer Session

7:00 p.m. – Meeting Adjourns

## **CEQA/NEPA Scoping Process**

The Kern County Planning and Community Development Department as Lead Agency (per CEQA Guidelines Section 15052) and the U.S. Bureau of Land Management (BLM), Ridgecrest Field Office, as federal Lead Agency, are preparing a joint Environmental Impact Report (EIR), per the California Environmental Quality Act (CEQA) Guidelines Section 15161, and Environmental Impact Statement (EIS) per the National Environmental Policy Act of 1969 (NEPA) for the Alta East Wind Project proposed by Alta Windpower Development, LLC (Project Proponent). The joint EIR/EIS may include an amendment to the California Desert Conservation Area (CDCA) Plan.

Pursuant to the requirements of CEQA and NEPA, this scoping meeting is being held to receive public and agency comments on the preparation of the joint EIR/EIS for the Alta East Wind Project. The process of determining the scope, focus, and content of the EIR/EIS is known as "scoping." Scoping helps to identify the range of actions, alternatives, environmental effects, methods of assessment, and mitigation measures to be analyzed in depth, and eliminate from detailed study those issues that are not important to the decision at hand. This is not a public hearing; however, the public may be present and offer comments. A court reporter is present and will be preparing a written transcript of the meeting. If you intend to address an item on the agenda, please prepare a comment card and return that card to agency staff before the comment session begins. Written comments may also be submitted on the comments sheets at the meeting or after the meeting until August 15, 2011.

The comment submittal forms have been prepared to allow for your comments to also apply to the proposed Rising Tree Wind Farm Project, if applicable. The scoping meeting for the Rising Tree Wind Farm Project is scheduled to begin promptly at 5:00 p.m., immediately prior to the Alta East Wind Project scoping meeting.

Comments specific to the Rising Tree Wind Farm Project should presented during the Rising Tree Wind Farm Project scoping meeting or be submitted in writing, as described below, prior to August 16, 2011.

#### Alta East Wind Project Description

(a) General Plan Amendment 2, Map 168; (b) General Plan Amendment 2, Map 168-27; (c) General Plan Amendment 3, Map 179; (d) General Plan Amendment 1, Map 180; (e) Zone Change Case 10, Map 168; (f) Zone Change Case 4, Zone 168-27; (g) Zone Change Case 3, Map 179; (h) Zone Change Case 6, Map 180; (i) Zone Change Case 47, Map 197; and (j) Conditional Use Permit 7, Map 168. Alta Windpower Development, LLC (PP11212)

The proposed Alta East Wind Project is a renewable energy project that would generate up to 360 megawatts (MW) on a 3,200-acre project site located two (2) miles west of the intersection of State Route (SR) 58 and SR 14, in Mojave, California, and north and south of SR 58, on 1,117 acres of private lands under the jurisdiction of Kern County and 2,083 acres of public lands administered by the BLM. The requested applications would also permit construction of ancillary facilities and supporting infrastructure, and a concrete batch plant to provide concrete and materials for turbine, substation, and building foundations. Permanent facilities would include up to 120 wind turbine generators, service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, meteorological towers, and operations & maintenance facilities.

The Project Proponent, Alta Windpower Development, LLC, is requesting: (a) an amendment to the Circulation Element of the Kern County General Plan to eliminate section and mid-section line road reservations within Map 168; (b) an amendment to the Circulation Element of the Kern County General Plan to eliminate section and mid-section line road reservations within Map 168-27; (c) an amendment to the Circulation Element of the Kern County General Plan to eliminate section and mid-section line road reservations within Map 179; (d) an amendment to the Circulation Element of the Kern County General Plan to eliminate section and mid-section line road reservations within Map 180; (e) a change in zone classification from the E (20) (Estate 20 acres) District and A-1 (Limited Agriculture) District to the A (Exclusive Agriculture) District, A WE (Exclusive Agriculture - Wind Energy Combining) District, in Map 168; (f) a change in zone classification from the A-1 District to the A District, A WE District, and A FP (Exclusive Agriculture – Floodplain Combining) District in Map 168-27; (g) a change in zone classification from the A-1 District to the A District and A WE District in Map 179; (h) a change in zone classification from the A-1 District to the A District and A WE District in Map 180; (i) a change in zone classification from the A-1 District to the A District in Map 197; and (i) a conditional use permit to allow for the use of a temporary concrete batch plant during construction of the wind energy facility in Map 168.

Alta Windpower Development, LLC, has also requested a right-of-way (ROW) authorization from the BLM to construct, operate, maintain, and decommission the proposed Alta East Wind Project. Pursuant to the CDCA Plan, sites associated with power generation or transmission not identified in the CDCA Plan are considered through the plan amendment process.

#### **How to Submit Scoping Comments**

Comments on issues and alternatives regarding the proposed Alta East Wind Project Draft EIR/EIS may be submitted verbally and in writing at tonight's scoping meeting. Comments may also be submitted until August 15, 2011, by any of the following methods and contacts listed below.

Ms. Jacquelyn Kitchen
Planner III
Project Manager
Kern County Planning and
Community Development Department
2700 M Street, Suite 100
Bakersfield, CA 93301-2370
Phone: (661) 862-8619
Fax: (661) 862-8601

Email: KitchenJ@co.kern.ca.us

#### **AND**

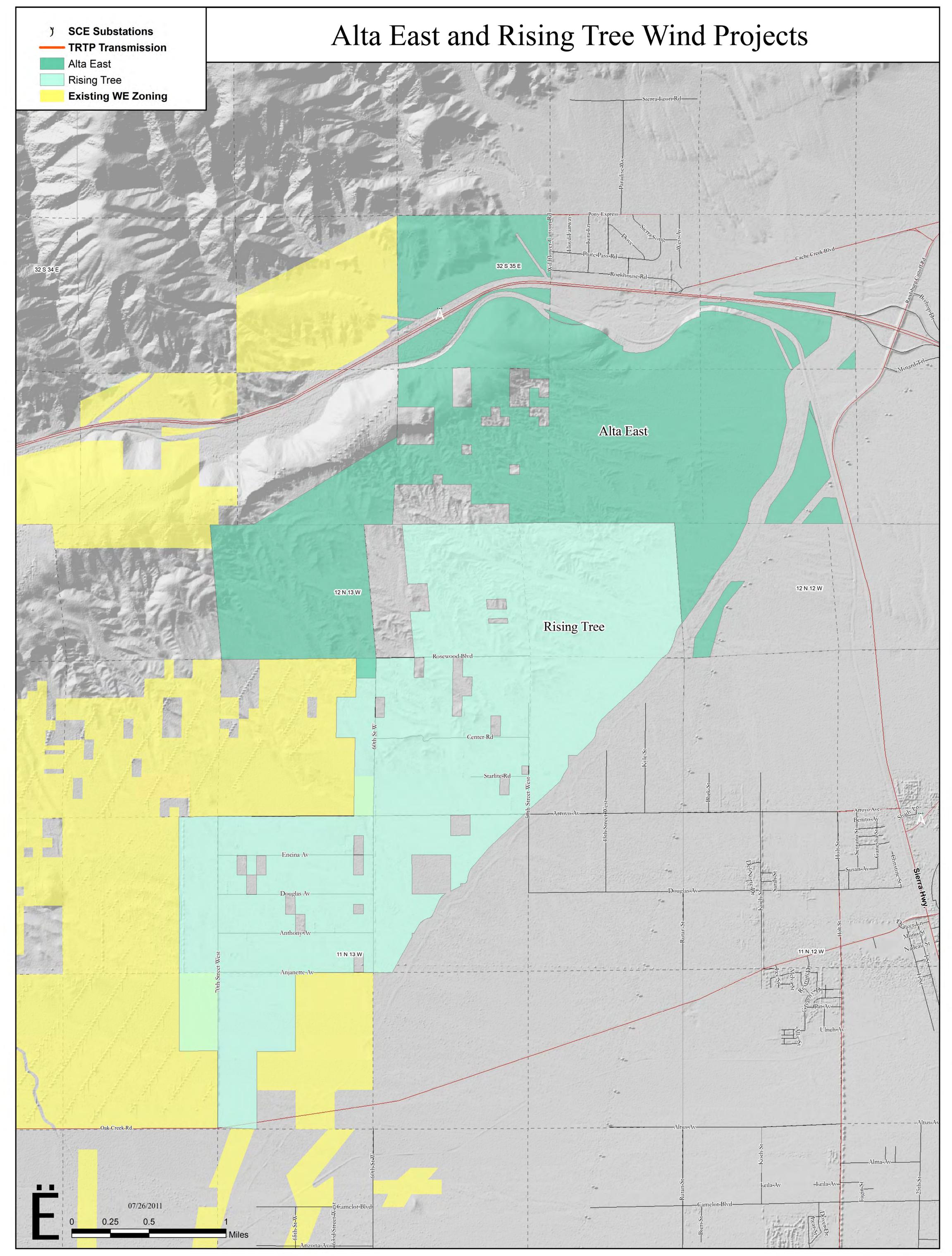
Mr. Jeffrey Childers
Project Manager
Bureau of Land Management
California Desert District Office
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553-9046
Fax: (951) 697-5299
altaeast@blm.gov

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

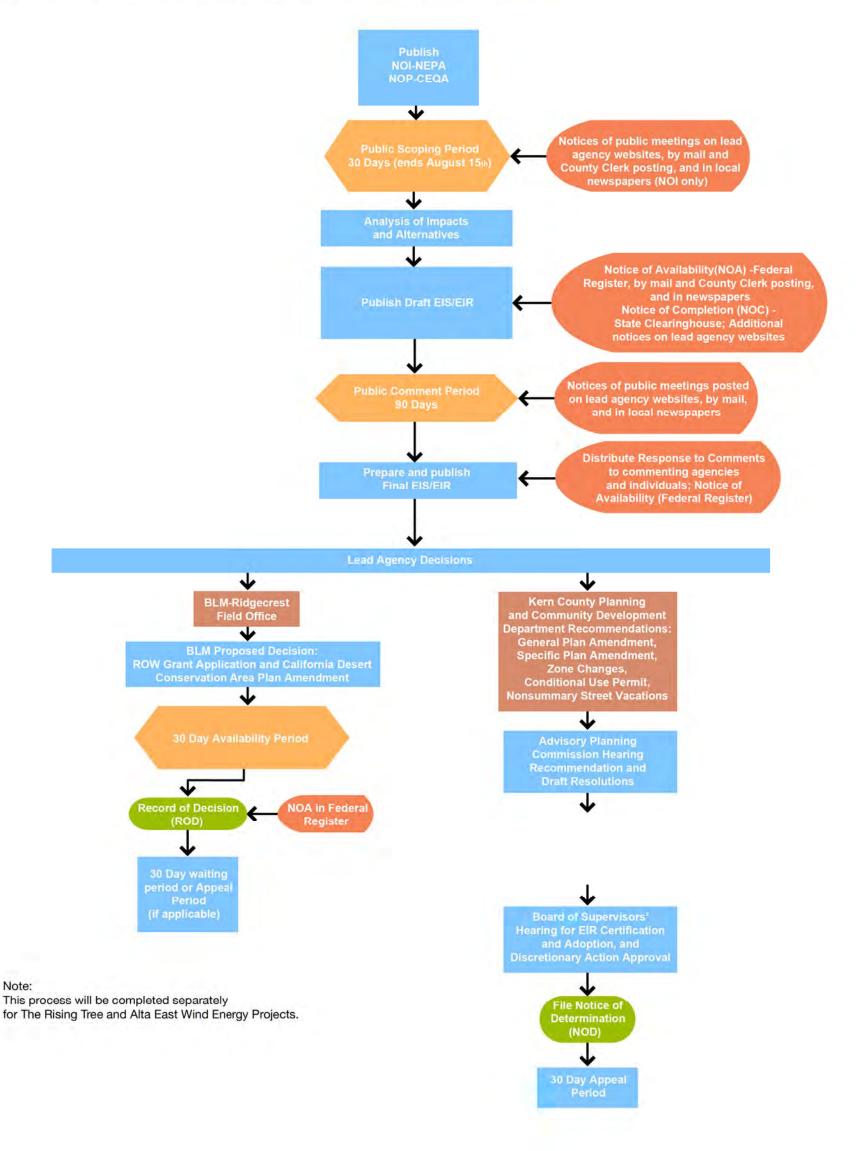
#### Requests for Special Assistance

Pursuant to the Americans with Disabilities Act, disabled individuals who need special assistance to attend or participate in the scoping meeting may request assistance at the Kern County Planning and Community Development Department or by calling Janet Bowtell at (661) 862-8615. Every effort will be made to reasonably accommodate individuals with disabilities by making meeting materials available in alternative formats. Requests for assistance should be made five (5) working days in advance whenever possible.

Posted: August 3, 2011 CBM:MDH









Bureau of Land Management & Kern County, California
Public Scoping Meetings

Rising Tree Wind Farm EIS/EIR and Alta East Wind Farm EIS/EIR

Veterans Building, Mojave, CA - August 4, 2011

## SIGN-IN SHEET FOR SCOPING MEETINGS

NAME	AFFILIATION	MAIL ADDRESS	PHONE	EMAIL	Add to Rising Tree Mailing List?	Add to Alta East Mailing List?
50. Villogram	9	14719 Wirchester Dag				
DANIEL DOSON		Borkerstield & 93305 2028 Monterty 87,	626-864-6137)			
David Dmohowski	Premier Braup	800 TUXTON 5700 Bale 93381	661-377-1089	daved expectes yn	/	
Trene Matrick	·	P.O. Box 705 Mojowe CA 93502	818 421 7880		/	
Ferry ADAMS		1 Box 227 93549				
Researd. Jama	T.M. WPARK MC	·				



Bureau of Land Management & Kern County, California

**Public Scoping Meetings** 

Rising Tree Wind Farm EIS/EIR and Alta East Wind Farm EIS/EIR

Veterans Building, Mojave, CA - August 4, 2011

## SIGN-IN SHEET FOR SCOPING MEETINGS

NAME	AFFILIATION	MAIL ADDRESS	PHONE	EMAIL	Add to Rising Tree Mailing List?	Add to Alta East Mailing List?
Dan Reinke	Edwards AFB	POB 385 Edwards, CA 93623		danny. 1einte @ edwards. H	nil x	Ŋ
parlotte Reale	Mijane	14356 Bieri Majane	8242354			
TIM MARVION	EDPR		510.292.0216	0 4.		
John Mions	Homo ownon	POBOX 383 MOTAWILA	661 824 8849			
Jim CROCOLL	Mij zre Paridant	16329 Koch St. MojereCA				V
Jon Van Der Zee	EDPR	58 SW Yamhill St Portland, OR 97204	003-535-1516	jor. Vanderzee@horizonwind.		



Bureau of Land Management & Kern County, California

Public Scoping Meetings

Rising Tree Wind Farm EIS/EIR and Alta East Wind Farm EIS/EIR

Veterans Building, Mojave, CA - August 4, 2011

## SIGN-IN SHEET FOR SCOPING MEETINGS

NAME	AFFILIATION	MAIL ADDRESS	PHONE	EMAIL	Add to Rising Tree Mailing List?	Add to Alta East Mailing List?
JOHNLY CASAVA	EDPR	53 Swyanitill Portland, or 97214	507.535.1528	Jollny. CASANAGE EDPR. Com	No	$N_6$
Deborah Crocoll	Resident	16329 Koch St		Crocoll65@Skaglotal.	net i	<u></u>
Jan P Chape	Resident	14274 Dieri ST	661824250	<i>/</i>		
MICHAEL FORTUND	)	40 BOX	661-478-713z			
Sus AN FORTHNA	′/	//	//			
Mark Casper	Terra-Gen		CHL-292-2011	Mcasper Eterra-genpower. com	N.	No



Bureau of Land Management & Kern County, California

Public Scoping Meetings

Rising Tree Wind Farm EIS/EIR and Alta East Wind Farm EIS/EIR

Veterans Building, Mojave, CA - August 4, 2011

## SIGN-IN SHEET FOR SCOPING MEETINGS

NAME	AFFILIATION	MAIL ADDRESS	PHONE	EMAIL	Add to Rising Tree Mailing List?	Add to Alta East Mailing List?
Bennett Collie	Terra-Gen	11512 El Remino Real #100 San Dieso, CA 92130		b collieretspnyc.com		V
Randy Sienks	Terra-gen	ŧγ		rjenks@Terra-genpow	er.ca	V
Joseph Sherino	0 w new					
George Pearson	((	20 Box 156 Mojave 93402				
George Pearson	Resident	Plojave 93502		9 pep 3 @ Yahoo.com		
Moira Sanders	SAIC	2012 Mountain Ave. SB, CA 93101		Sandersmnesaiceom		





Bureau of Land Management & Kern County, California

Public Scoping Meetings

Rising Tree Wind Farm EIS/EIR and Alta East Wind Farm EIS/EIR

Veterans Building, Mojave, CA - August 4, 2011

## SIGN-IN SHEET FOR SCOPING MEETINGS

NAME	AFFILIATION	MAIL ADDRESS	PHONE	EMAIL	Add to Rising Tree Mailing List?	Add to Alta East Mailing List?
June Hall-Leclere		5800 Rosewood Bl	661-824-4339			
Jacques Leolero		5818 Rosewood Bl	661-824-0184			·
Jin Pro	Noer	555 W. Liane Li	969 223046	jim. Pra-avilance	*	
Andrew Melson	SAIC	5464 Carpentena Ave Capentiere CA	845-706-6403	no netranado saie. com		
DAVID Simoles		POBOX 7 MOTEVE, CA 93502	66/824-2(/0			
Hedy Kocznara	Aspen Envir-Group	102 5 11 01 00 00 11 St. O	415-955-4775 X207	Miocznora Co aspenly. com		X-



Bureau of Land Management & Kern County, California
Public Scoping Meetings

Rising Tree Wind Farm EIS/EIR and Alta East Wind Farm EIS/EIR

Veterans Building, Mojave, CA - August 4, 2011

## SIGN-IN SHEET FOR SCOPING MEETINGS

NAME	AFFILIATION	MAIL ADDRESS	PHONE	EMAIL	Add to Rising Tree Mailing List?	Add to Alta East Mailing List?
Pegar Vahidi	Aspen	5020 Cheseloro Rd. Agoura Hills, CA 9130	818 597	nvahidi aaspeneg.c	On	$\times$
The Radmach		913	5/			
- Bed Bel		22301 PINE CYN ZD TEHACHAPI CA 93561	661 822 7617			
Murynyerky		2420 Three Springs Dr. Westlake Killage, CA 91361	818		X	<b>X</b>
Robert Blackburn		1495 North Barca St. Camarillo, A 93010	805 482-4836		X	$\langle \langle \rangle$

## **APPENDIX D**

# **Scoping Meeting Transcript**



# ALTA EAST WIND ENERGY PROJECT SCOPING MEETING VETERANS HALL

MOJAVE, CALIFORNIA

AUGUST 4, 2011 7:00 P.M.

#### APPEARANCES:

JEFF CHILDERS:

BUREAU OF LAND MANAGAMENT CALIFORNIA DESERT DISTRICT

OFFICE

MORENO VALLEY, CALIFORNIA

CHRIS MYNK:

KERN CO. PLANNING, COMMUNITY DEVELOPMENT DEPARTMENT

BAKERSFIELD, CALIFORNIA (Supervising Planner)

JACQUI KITCHEN:

KERN CO. PLANNING, COMMUNITY

DEVELOPMENT DEPARTMENT BAKERSFIELD, CALIFORNIA (Project Manager for Alta

East)

James G. Ortiz, CSR Cert. No. 5756 (661) 868-4942

#### INDEX

COMMENTOR	PAGE
GEORGE PEARSON	9
IRENE MATIGICK	10
DANIEL DOTSON	12
MARILYN YURKI	15

# Mojave, California, August 4, 2011 7:00 p.m.

#### --000--

MR. CHILDERS: We wanna start the scoping meeting on the Alta East Windpower. We had the Rising Tree projects from seven to nine -- or from five to seven, and we're going to do Alta East from seven to nine. I want to try to do the same kind of introductions we did before: I'm Jeff Childers from the California Desert District, Bureau of Land Management Moreno Valley. I'm the project manager for the Alta East project. We have some staff here from this county.

MR. MYNK: Chris Mynk, Kern County Planning and Community Redevelopment Department. I'm a supervising planner.

MS. KITCHEN: I'm Jacqui Kitchen, I'm the project manager from the Kern County Planning and Community Development Department.

MR. CHILDERS: And we have some of our support staff helping us out as well.

So the Alta East project is now another joint document with BLM and the county; we're going to be doing a joint CEQA/NEPA document, means we're going to be addressing the Environmental Policy Act, the California Quality

Act in one document.

The project consists of lands both under the jurisdiction of Kern County for Land Use and the BLM. This particular project has a lot more BLM interest than the Rising Tree project. I'll let Chris go into the details, specifically on the acreages.

So the processes as we have described before, we're at the very beginning of what we call the NEPA process. I'm gonna talk about NEPA and Chris is gonna talk about CEQA.

The NEPA process starts out with our scoping: we send out a Notice of Intent through our federal registered noticing process. It let's everybody know, hey, we're getting ready to start a process. A lot of you have commented on how to get that information, and if you need more information on how to get those things, let me know, I'll pass it on to you.

So we start off with the NOI, we come out to the community, we do a scoping meeting, ask for your input about the issues that are out there on the ground.

Sometimes we may not recognize some of the issues that are important to people; we want your input. We're here to get your input in a number

of different ways: we're recording it just on the regular recorder, we have a court reporter who's taking down the transcripts, and we have the speaker cards; if you wanna speak, fill out a card, bring it up here. You don't have to stand up, you can sit there and talk if you want to. Take those comments, we'll take those comments, that part of the scoping process, we will take it back and we'll do all the analysis of the resource sections. And we'll also analyze any specfic issues that you've brought up.

so this is kind of a give and take: You give us things that you're concerned about, we'll take that back and compile it with all of our internal scoping, the other agencies' responsibilities, the county's responsibilities, we'll draft a document, an environmental report, environmental assessment, EIS/EIR. We'll send that back out to you for 90 days. The draft document will go out for 90 days. So you'll have 90 days to comment on this document. Tell us what we missed. Tell us if we missed something. If you said you wanted to look at the purple horned flower, and we didn't cover the purple horned flower, hey, you missed the purple horned flower. So we'll go back and address that issue.

So that's what we're trying to do, get that information from you all, write it down, compile it and try to get it in a number of different ways: people taking notes, the court reporter. We

5 want your input.

Then we'll come out with a draft document. You'll comment on that. We will take your comments and analyze them, make sure we've covered everything. We'll respond to those comments. We have a couple different ways of doing that; county's got a little different process, which is cool. We'll respond to those comments, and then we'll come back out with the final document.

At this point it gets a little different, the county and BLM. We're gonna have a final document that's gonna go out for about 30 days. After that 30-day period we'll come up with a Record of Decision, we'll have all of our findings in there. We'll take that decision and provide it to you for comment for another 30 days. So then that's actually an appealable period.

This project does include a plan amendment to the California Desert Conservation Area Plan.

Parts of this project are included in three different types of what we call multiple use classes. So there's some differences to this

project that are a little bit different than Alta East or -- excuse me, than Rising Tree.

So we'll do a plan amendment process that gives you another 30 days of protest period. And then at the end of that time we'll work with the applicant to sign a Notice of Receipt.

So that's pretty much the conclusion of the NEPA process. There are some other processes that go along with it. But we really are here to get your comments. I'm gonna turn it over to Chris now to talk about the CEQA portion.

MR. MYNK: So most of you here were here earlier, when we were speaking.

The CEQA process does follow the NEPA process at the beginning: It does vary towards the end of the process. So after the comment period that Jeff talked about, the county then has a Response to Comments period. And that is where we formulate all of our responses to comments, and we send that back out to all of the people that commented on the projects. If you commented on the project, you would receive our responses back, a whole list of everybody's responses. That is mandated to be sent to all commentors at least ten days before a public hearing. We typically like to do three weeks before a public hearing. During

that time, we send out a Public Hearing Notice.

And that notice is for the planning commission

meeting. Planning commissioners are appointed by

the board of supervisors. They make a

recommendation on the project to the board of

supervisors. And this is for all county portions

of the project.

After that meeting, we then send out a Public Hearing Notice to the board of supervisors and they would make the final decision. That meeting is held in Bakersfield, it's usually at 2:00 p.m. on Tuesdays. And you would be notified well in advance of that meeting, should you choose to show up and talk about the project.

between the NEPA and CEQA process. I didn't say it before, but we're kind of excited that we get to do this process. My staff is very versed in writing CEQA documents and going through that county process. But this is kind of some of the first times that we have been able to do a joint document for a joint project. It's a little interesting, it's been fun to work with the different agencies, see different perspectives, get different feedback and input on the process. So that's been a good little learning exercise for

us. I'll go ahead and start talking about the project that we have before us.

This project is pretty similar to the Rising Tree Project, it's the Alta East Wind Energy Project by Alta Wind Power Development, LLC. For the county they have four general plan amendments, four zone changes and one conditional use permit for a temporary batch plant. That is the request before us.

The project is located two miles west of the intersection of Highway 58 and Highway 14, directly north of the Rising Tree Project, for everybody that was here at that meeting earlier.

The Project consists of 360 megawatts of electricity, 3,200 acre project site.

of that project site, 2,083 acres are on public land. So it's a little larger public portion than the previous project. But the same concept applies: You would have ancillary facilities such as access roads, underground transmission lines, above ground transmission lines, an O. and M. facility, operations and maintenance facility. All of these are part of the project that is being proposed before the county and the BLM.

With that, I'll turn it back over to Jeff

to start the public testimony portion.

MR. CHILDERS: Just to give you a rundown how we wanna do this, we'll do the same thing we did before: if you'd like to speak, if you filled out a card before, we have your name. Just say your name beforehand, so we can capture that.

We'll take your name, you can say your comments, we'll take notes.

Please let us know if there's any issues. That's what we're really looking for, if there's any kind of environmental issues, concerns that you might have about what the project is, we'll capture that information. And when we're done with everybody who wants to speak, we'll do the open house again, and talk about this project, which is a little different, has a little more public lands influence, and we can talk about the issues that are specific to this site as well, which is a little bit different resource issues out on this site, versus the Rising Tree site. So we'll do that.

With that, if you filled out a Comment card, you'd like to speak, just raise your hand and we'll get started. If you wanna have the same comments that you had earlier included, just let me know. You don't have to say anything right

now, but let me know, we'll just do that.

GEORGE PEARSON: Is this the time to stand up and speak your peace?

MR. CHILDERS: Yes, sir, if you'll say your name, we'll be good to go.

GEORGE PEARSON: My name is George Pearson,
I spoke earlier. There's two points. First of
all, what are these projects going to do to the
local water tables? This is brought to my
attention by somebody who is down Backus Road,
they thought their water level had dropped below
the well they dug a long time ago. Turns out they
had a broken pipe, so it wasn't really a water
table problem. But the existing question is, what
does this do to the water situation? I don't know
how much the wind turbines can use, I can't see
what they use water for, except to make the
concrete in the first place. But who knows.

And the second thing is, there's a bigger issue that I think is being skirted, is that a lot of the people go out and live in the Homestead area and other places like that, do that out of choice, because they don't wanna put up with the nonsense and control trips and all the other garbage that get, you get involved with in living in a community, even as small as Mojave. So, this

 $\perp \perp$ 

is, can be construed as a threat to their way of life and their peace of mind. And that certainly has to be taken into consideration. Because it's a direct intrusion on somebody's personal space. That's about it.

MR. CHILDERS: Thank you. Anyone else?

IRENE MATIGICK: Irene Matigick again. To reiterate the same things I said for the last project, I did have a couple of questions:

Because there's a lot more BLM land involved, is there going to be more general public notice? We talked about it during break that I'm involved actually in some BLM dealings in Nevada so, it's not like it's just Mojave people. Is there a way to notify just more general people that might have an interest in the desert and in the changes that are being made?

MR. CHILDERS: Get with me after.

IRENE MATIGICK: Okay. Also, when it comes to you putting out the report, you were giving an example of red, the purple whatever plant, and is there a way to I. D. stuff by pictures? Because what you might call purple I might call periwinkle, and we're gonna be -- are we talking about the same plant? Animals I have no problem with, but when it comes to the plants and the

general issues...

Again, trust issues are part of it. Just making sure that the, the people doing the asking of the questions and giving of the answers are actually held accountable for information they're gathering, and that there's a way, I don't know if there's any kind of public oversight for any of that, so we're sure that, you know, they don't just take the report, and one report that really has a lot of information in it, kind of file it in a circular file. I would hate to see that happen. That's just my own suspicious mind. And the fact that everything seems to be LLC, which is that whole temporary, we're here today, gone tomorrow feeling of dealing with things.

JOSEPH SHERLINE: Limited liability corporation.

IRENE MATIGICK: Exactly.

JOSEPH SHERLINE: If somebody knocks on the door and nobody's home.

IRENE MATIGICK: Be sure and write us next week and we're not here.

Electromagnetic waves, I don't know if that has anything to do with it, I mean, you're putting in transmission, I know you don't hold electricity, but there's gotta be a way to track

it out of there, whether it's under the ground, over the ground, whatever. Electromagnetic waves have a huge impact on people's healths, on just living conditions. Just it has a large impact on wildlife, which are a lot more sensitive than we tend to be. Things like bats, it affects the echo location that's going to have a huge impact on them. And again, back to the migratory birds and all; like I said, all the comments that I made at the last meeting, just kinda ditto.

1.2

If there's any way at all, instead of just completely ripping everything out and denuding and watching the winds come through and blow up big dust storms, if there was a way they can consider co-existing and making it so they're not so damaging to the land around you and you're actually much more selective on how you access the area you're gonna access, and how much of a footprint you leave. That's it.

MR. CHILDERS: Anyone else?

DANIEL DOTSON: I have a couple questions. The neighborhood that's towards the top of that map there, were all people that live in that neighborhood notified? I'm not sure where everyone's from. Because that's a neighborhood right there that's just east of that green mark.

1 JACQUES LECLERC: I'm the last one up there, me and my wife, I don't know of anybody 2 else. Well, we have a neighbor, but he works for 3 the wind farms. 4 DANIEL DOTSON: But are you north of the 5 highway there? I'm talking all the way, if you 6 7 look all the way to the top, there's a full block, there's Rockhouse Road. 8 9 JACQUES LECLERC: That's Cache Creek, yeah, that's on the other side. 10 DANIEL DOTSON: If those people there were 11 12 notified as well? JOSEPH SHERLINE: You talking about here? 13 DANIEL DOTSON: To the right. 14 15 quite a few people. 16 JACQUES LECLERC: That may be Hanson's property up in the mountains. 17 DANIEL DOTSON: Some of it is Hanson's. 18 But there are other properties there. 19 20 MR. MYNK: The standard notification for a 21 Notice of Preparation is a thousand foot around the project site and all parcels within the 22 project site. So that that's our standard 23 notification for a Notice of Preparation. 24 We also, then when we go through the draft 25

EIR, we would do the same, but we also then start

12

26

to publish things in the local newspapers. So that's where we get even a broader spectrum of participation.

The scoping process is really, was really laid out in CEQA for agency, agency consultation. Kern County, we feel as planners, that it shouldn't just being limited to agencies. And that's why we go further than what state law requires of us and we actually notify people within a thousand feet of the project. Other jurisdictions may only do notification to agencies and not actually provide any public participation from local residents. So we feel like we're going beyond what is required of us by state law to notify people. And we continue to provide more notification as the process goes on, and we do that even more so than what's required of state law of us.

IRENE MATIGICK: That kind of brings me back to the BLM question versus county property. It's one thing to notify the homeowners, but again, with BLM land, you're talking public land. There's a much larger interest in what should or shouldn't be preserved for the greater public. So a thousand feet just really doesn't cut it. It really should be much more public notice. And if

you've ever tried to read the sections of the newspaper where you do your official legal, yes you've done your due diligence and you're covered, but if you really look at it, you can go blind trying to read that and find out your particular issue. If there were a way to do an article or something on the local news, something where it's a little bit more, I guess public notification, because there's more people involved than just the ones that live there.

MR. CHILDERS: Yes, ma'am?

MARILYN YURKI: I'm here because my husband passed away last year and he had quite a bit of land in Rosamond and Mojave, and I'm just getting a handle on where it is. And I got this letter and so the closest place I could think I am is by like Backus and 30th. Is this actually a thousand feet from that -- or how do I find out what parcels of mine are actually within a thousand feet? Because it doesn't say that on the letter.

MR. CHILDERS: We'd have to --

MR. MYNK: Ma'am, what we could do is,

Jacqui Kitchen here is the day-to-day project

manager for the county, she has a list of all

parcels that are either within the project

boundary or a thousand feet from the project

boundary. I would just suggest that you give her that information tonight, if you have it, or you guys can exchange numbers and then contact her later on and she'll walk you through, send you a map, e-mail you, whatever you need.

MARILYN YURKI: That would show which parcels --

MR. MYNK: Exactly. It's common for us to go ahead and take people's parcels when they ask us and put that on a map and send it to them to show them exactly where they are in relation to the project boundary.

MR. CHILDERS: Can you please state your name?

MARILYN YURKI: Marilyn Yurki.

MR. CHILDERS: Again, I wanna reiterate, this is not the end of the process. The scoping process continues through, and we really wanna have everybody's input, as much as you can give us. If you have a concern or a thought process, send us communication, either a letter, you can address it to the county, you can send us e-mails, our e-mails, the project specific e-mails are in the agendas tonight.

If you have any specific questions, feel free to give us a ring and talk to us. We're here

to serve and we're here to take your comments.

With that, I think we're pretty much done with the public scoping. Nobody has anything else to say? Again, we'll be here until everybody decides to go home. And I'll be here until you tell me to go home. We'll be here and we appreciate your input. And again, thank you all for coming. (Whereupon, the hearing was concluded at 7:45

p.m.)

--000--

STATE OF CALIFORNIA )

COUNTY OF KERN )

I, James G. Ortiz, a Certified Shorthand
Reporter, hereby certify that I, as Official
Reporter, was present and took down correctly in
shorthand all the testimony and proceedings in the
foregoing-entitled matter on August 4, 2011; and I
further certify that the annexed and foregoing is
a full, true and correct statement of such
testimony and proceedings, and a full, true and
correct transcript of my shorthand notes thereof.

Dated at Bakersfield, California on this 18th day of August, 2011.

Official Reporter Cert. No. 5756

## **APPENDIX E**

# Written Comments Received During Public Scoping Period

### Nick Dunn Fire Chief & Director of Emergency Services

Fire Department Headquarters 5642 Victor Street • Bakersfield, CA 93308 • www.kerncountyfire.org Telephone 661-391-7000 • FAX 661-399-2915 • TTY Relay 800-735-2929



2 May 2011

Alta Windpower Development LLC Attention: Randy Jenks 11512 El Camino Real Suite 100 San Diego, CA 92130

Mr. Jenks,

Your proposed wind energy project will directly impact Kern County Fire Departments (KCFD) existing emergency response and general service capacities.

This Fire Department requests the following mitigation measures to offset the service deficits precipitated by your project:

(Note, please, facility, accessory and/or process modifications will conform to KCFD regulations and standards).

- Install and maintain water tanks/cisterns strategically installed at one 10,000 gallon tank per square mile.
- Install and maintain access roads, which interlace the project site.
- Donate fire safety educational material through the Kern County Fire Prevention Unit to the elementary schools in the Mojave and Tehachapi areas. Contact Fire Prevention at (661)391-7080.
- Donate rescue equipment and gear to the Kern County Fire Department for fire stations in the Mojave and Tehachapi areas. Contact Fire Prevention to discuss at (661)391-7080.

Please remit \$90.00 to cover project impact/mitigation processing costs.

Respectfully submitted,

NICK DUNN, Fire Chief

Benny Wofford, Fire Marshal

This is an example of what page 2 would look like.

#### Jacquelyn Kitchen - Alta East Wind Energy Proj

**From:** Laith Sheet <llsheet@hotmail.com>

**To:** <kitchenj@co.kern.ca.us>

**Date:** 07/19/2011 9:35 AM

**Subject:** Alta East Wind Energy Proj

Hi Jacquelyn, I am writing you as a property owner who cannot attend the upcoming planning meeting where the referenced project will be discussed. I own three parcels of land that will be less than a 1000 feet from this proposed Project. First let me say that if this project is allowed to progress it will basically render my property to be worthless. I am saying this because of the noise and negative esthetic and nature value that this project will contribute to the environment around that area. I have seen similar projects near Indio and the Altamont Pass area of CA, both of which have resulted in those same negative consequences with no restetution to the property owners around them.

My only suggestion is to obligate the sponsors of any such project to purchase all properties within a one mile radius around the project. That is really the only equitable thing to do.

Anyway - you have my NO vote.

Regards, Laith Sheet 925.352.4603

#### NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364 SACRAMENTO, CA 95814 (916) 653-6251 Fax (916) 657-5390 Web Site work make as a gray ds\_nahc@pacbell.net



July 29, 2011

Ms. Jacquelyn R. Kitchen, Planner

### Kern County Planning and Community Development Department

2700 "M" Street, Suite 100 Bakersfield, CA 93301

Re: SCH#2011071051 CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) fo the "JRK 01-11; Alta East Wind Energy Project, GPA 2, Zone Map 168;" located in the Mojave Desert and the Tehachapi Wind Resource Area; Kern County, California

Dear Ms. Kitchen:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3<sup>rd</sup> 604.. The NAHC wishes to comment on the above-referenced proposed Project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: Native American cultural resources were not identified within one-half mile of the project site, the 'area of potential effect (APE), based on the USGS coordinates provided. The absence of archaeological items at the surface level does not preclude their existence at the subsurface level once ground-breaking activity is underway.

The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to C"A Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends avoidance as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

Furthermore we recommend, also, that you contact the California Historic Resources Information System (CHRIS) California Office of Historic Preservation for pertinent archaeological data within or near the APE, at (916) 445-7000 for the nearest Information Center in order to learn what archaeological fixtures may have been recorded in the APE.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 et seq), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 et seq. and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 Secretary of the Interiors Standards for the Treatment of Historic Properties were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code 5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code 6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic

Places and there may be sites within the APE eligible for listing on the California Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton Program Analyst

+ rogram / maryst

Cc: State Clearinghouse

Attachment: Native American Contact List

#### California Native American Contact List

Kern County July 29, 2011

San Manuel Band of Mission Indians James Ramos, Chairperson

26569 Community Center Drive Highland

, CA 92346

(909) 864-8933

(909) 864-3724 - FAX

(909) 864-3370 Fax

Kitanemuk & Yowlumne Tejon Indians Delia Dominguez, Chairperson

981 N. Virginia

Yowlumne Kitanemuk

Covina , CA 91722

deedominguez@juno.com

(626) 339-6785

Tule River Indian Tribe Ryan Garfield, Chairperson

P.O. Box 589

Yokuts

Serrano

Porterville

,CA 93258

(559) 781-4271

chairman@tulerivertribe-nsn.

gov

(559) 781-4610 FAX

Ron Wermuth

P.O. Box 168

Kernville , CA 93238

warmoose@earthlink.net

(760) 376-4240 - Home

(916) 717-1176 - Cell

Tubatulabal

Kawaiisu

Koso

Yokuts

(661) 753-9833 Office

(760) 885-0955 Cell

P.O. Box 221838

Newhall

(760) 949-1604 Fax

San Fernando Band of Mission Indians John Valenzuela, Chairperson

→ CA 91322

Fernandeño

Tataviam

Serrano

Vanyume

Kitanemuk

tsen2u@hotmail.com

Teion Indian Tribe

Katherine Montes- Morgan, Chairperson

2234 4th Street

Yowlumne

Wasco

, CA 93280

Kitanemuk

kmorgan@bak.rr.com

Kawaiisu

661-758-2303

Tehachapi Indian Tribe

Attn: Charlie Cooke

32835 Santiago Road , CA 93510

Acton suscol@intox.net (661) 733-1812

Kawaiisu

Kawaiisu Tribe of Tejon Reservation David Laughinghorse Robinson

, CA 93238

PO Box 1547

Kernville

Kawaiisu

(661) 664-3098 - work

(661) 664-7747 - home

horse.robinson@gmail.com

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011071051; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the JRK 01-11 Alta East Wind Energy Project by Alta WindPower, LLC; located in the Mojave Desert near the intersection of State Route 58 and Highway 14, in the Tehachapi Wind Resource Area; eastern Keri County, California.

#### California Native American Contact List

Kern County July 29, 2011

Kern Valley Indian Council Julie Turner, Secretary

P.O. Box 1010

Lake Isabella, CA 93240

(661) 366-0497

(661) 340-0032 - cell

Southern Paiute

Kawaiisu

Tubatulabal

Koso Yokuts

Serrano

Santa Rosa Tachi Rancheria Lalo Franco, Cultural Coordinator

P.O. Box 8

Tachi

Lemoore

,CA 93245

Tache

(559) 924-1278 - Ext. 5

Yokut

(559) 924-3583 - FAX

San Manuel Band of Mission Indians
Ann Brierty, Policy/Cultural Resources Departmen

26569 Community Center. Drive

Highland , CA 92346

(909) 864-8933, Ext 3250

abrierty@sanmanuel-nsn.

gov

(909) 862-5152 Fax

Kern Valley Indian Council Robert Robinson, Co-Chairperson

P.O. Box 401

Tubatulabal

Weldon

, CA 93283

Kawaiisu

brobinson@iwvisp.com

Koso

(760) 378-4575 (Home)

Yokuts

(760) 549-2131 (Work)

Tubatulabals of Kern Valley
Donna Begay, Tribal Chairwoman
P.O. Box 226
Tubatulabal

Lake Isabella, CA 93240

drbegay@aol.com

(760) 379-4590

(760) 379-4592 FAX

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011071051; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the JRK 01-11 Alta East Wind Energy Project by Alta WindPower, LLC; located in the Mojave Desert near the intersection of State Route 58 and Highway 14, in the Tehachapi Wind Resource Area; eastern Kerl County, California.





# Proposed Rising Tree and Alta East Wind Farms

Public Scoping Meetings

Thursday August 4, 2011

## Comment Sheet

PLEASE PRINT CLEARLY

**Veterans Building** 15580 O Street Mojave, CA 93501-1835

Name: Mr John Myers & Family
Address: Po box 397
City, State, Zip: Mojowe Colif. 93502 Email: ask if needed
How did you find out about today's meeting? NOP Letter
My comments concern the proposed: Rising Tree Wind Farm Alta East Wind Farm  Both Wind Projects
Our Property parsol # are
237-132-26-06-4
237 - 132-28-00-0
237-132-41-00-7
237-132-27-00-7

All comments must be post-marked, emailed, or hand delivered by August 15, 2011, to be considered for incorporation into the Rising Tree and/or Alta East EIS/EIR. Written comments on the Draft EIS/EIR documents may be sent to Jeff Childers, BLM Project Manager by email: risingtreewind@blm.gov. You may also send written comments by mail to: Bureau of Land Management California Desert District, 22835 Calle San Juan De Los Lagos, Moreno Valley, CA 92553-9046 or by Fax (951) 697-5299. Or to: Mr. Michael D. Hollier, Planner II, Kern County Planning and Community Development Department, 2700 M Street, Suite 100, Bakersfield, CA 93301-2370 or by Fax (661) 862-8601 or by email hollierm@co.kern.ca.us

NOP coments.

Our family has lived here nearly 20 years. Our daughter was born here on our living room couch. And my husbands parents died here on this land they so loved!

We now have not one but two wind turbine companies wanting to build all around us, up to our property line. Horizon Wind Energy/EDP Renewable's is wanting to build on three sides of our property. And Alta Wind Infill 2 wants to build on the fourth side.

We moved here 20 years ago because we love the natural beauty and peacefulness of the desert. We love seeing the wide variety of desert wildlife that makes this area their home.

The rabbits, brown squirrel, chipmunks, Antelope, Kangaroo mice, And we have many bird species that live here year round Owls, hawks, falcons, ravens, house finch. And then their are all the migrating birds that come through each year Geese, Ducks, Crane's, Sometimes were lucky enough to have them land in our field.

Then their is all the desert snakes ,Mojave greens, King snakes, Coach Whip, horned lizards,

salamanders,

This is just a short list of what has been on our property. We love being away from the lights of town, So we can enjoy looking at the nights star filled

We love to teach our children about the natural wonders that are all around this beautiful Mojave area.

Please help protect this beautiful desert and the wildlife that lives here.

Both of these company's are all ready plowing down the Joshua trees, And this is prior to the NOP reports, and EIR. We have seen a large amount of bee's because of the Joshua trees being destroyed.

Many bees make their hives inside the Joshua trees.

Now our quiet and peaceful way of life is being threatened by these two wind turbine companies!

Now were going to be surrounded by nearly 500 foot tall turbines, DANGEROUSLY close to homes !!!

The Vesta's own safety manual states "DO NOT STAY WITHIN 1,300 FEET FROM TURBINE UNLESS IT IS That is a WARNING to their own workers. (probably has a lot to due with insurance)

What about the safety of us, The residents of Kern County ?

We are being told they can build 500 feet from home owners property.

Would you let your kids play that close to them ?

Their asking us to not only let our children play, But to live their.( during ALL wind speeds )

We would like to recommend a 2,000 foot set back from homes Measuring from base of residence to base of turbine ( NOT from uppermost blade tip to base of home )

We now live about two miles from the turbines south of Oak Creek Rd., We can hear the whooshing sound they make. Some night's it keeps us awake, and we have the red flashing lights lite up our home at night.

Our access road is Arroyo Ave. We would like to recommend a turbine setback of at least 600 + feet from access roads For the safety of the Kern County residents, In case the turbine should ever fall over, Break or

start a fire. The access road would not be blocked for residents getting to safety or Emergency vehicles.

We would also like to request that when any sound tests are done That the test are ongoing for one year duration ( AT ALL WIND SPEED'S )

Because of the vast area these two wind turbine projects they are now getting closer and closer to more homes in Kern County than before. These turbines are dangerous! If these are going to be built around the residents of this County, The county needs to step up it's fire protection for this area ! Many times the Mojave Fire Dept. is on calls to Rosamond or California City.

Their are many business people telling everyone this is the best thing possible for Mojave Well their only thinking of the old mighty dollar.

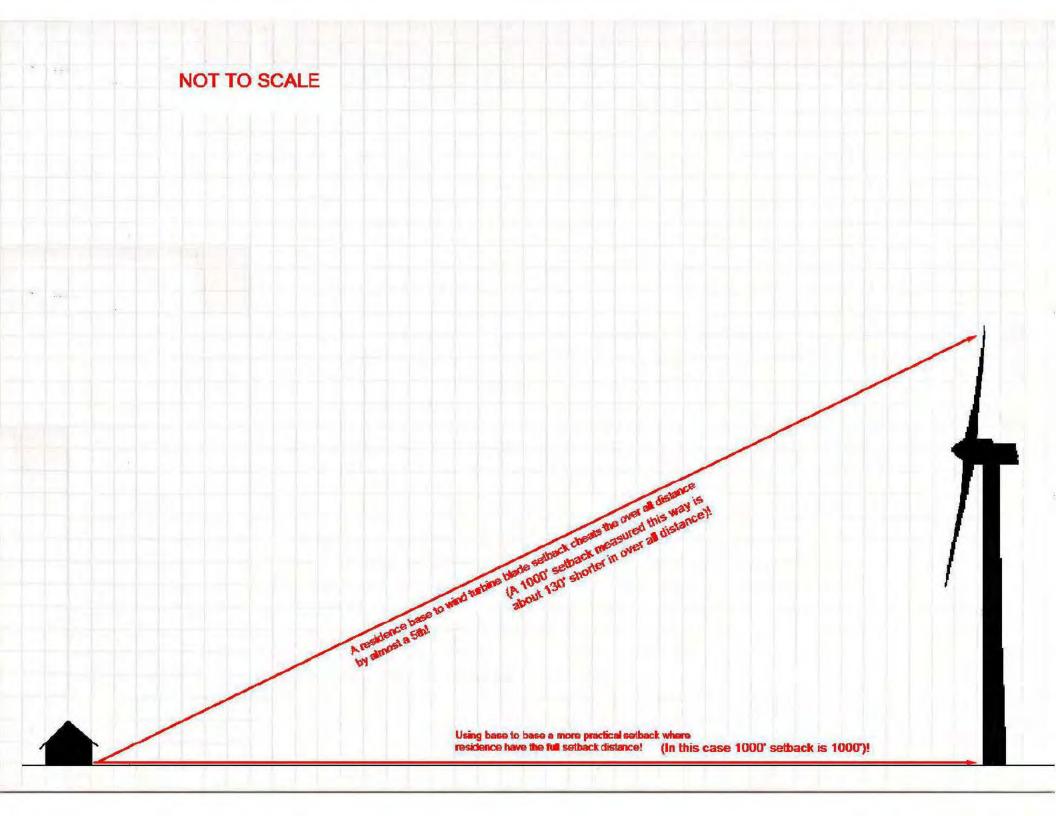
If this is so good for business then why have three long time Mojave businesses closed In the past two week's ?

NOP coments.

The concerned citizens that live very close to where these are going to be built Want to make sure the residents of Kern County are SAFE, from fire, turbines falling, shattering blades, many health concerns, and having the loud sounds and bright red lights flashing at night like strobe lights. PLEASE KEEP KERN COUNTY SAFE!

We would like to see a 2 mile distance/radius from any city/township residential area example.. Mojave Proper, Camelot, Country Modern, Western Village etc. This is for the PUBLIC SAFETY / HEALTH.

THANK YOU for hearing our concern's !



# COUNTY OF KERN DEVELOPMENT SERVICES AGENCY ROADS DEPARTMENT

Office Memorandum

To: Lorelei Oviatt, Director

August 5, 2011

Planning Department

Attn: Jacquelyn Kitchen, Planner III

From: Warren D. Maxwell, Transportation Development Engineer

Subject: 7-5.3 Notice of Preparation of Draft Environmental Impact Report Alta

East Wind Energy Project by Alta Windpower Development,

LLC.(PP11212); GPA #2, Map #168; GPA #2, Map 168-27; GPA #3, Map 179; GPA #1, Map 180; ZCC #10, Map 168; ZCC #4, Map 168-27; ZCC #3, Map 179; ZCC #6, Map 180; ZCC #47, Map 197; CUP #7, Map 168.

This Department has reviewed the Notice of Preparation of Draft Environmental Impact Report for the subject project and recommends the following:

- 1. Project construction timing may coincide with other neighboring projects. Coordinate construction traffic to avoid possible conflicts during the project construction phases.
- 2. Enter into a secured agreement with the Kern County Roads Department to ensure that any County roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the State and or Kern County.
- 3. Provide a Traffic Control Plan that addresses the routes, duration and manner of traffic control that will be implemented to accommodate construction related traffic.
- Obtain all necessary Encroachment Permits for any proposed work within the County road right of way. These permits may be obtained from our Permits Engineer.
- 5. Obtain all necessary Transportation Permits for any oversized or overweight (heavy) loads that will utilize County maintained roads, which may require California Highway Patrol escort. These permits may be obtained from our Permits Engineer.

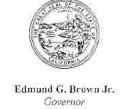
Thank you for the opportunity to comment on this project, if you have any questions or comments please contact Steven Young at 862-8860.



### California Regional Water Quality Control Board Lahontan Region

#### Victorville Office

14440 Civic Drive, Suite 200, Victorville, California 92392 (760) 241-6583 • FAX (760) 241-7308 http://www.waterboards.ca.gov/lahontan



August 9, 2011

File: Environmental Doc Review Kern County

Jacquelyn R. Kitchen Kern County Planning and CDD 2700 "M" Street, Suite 100 Bakersfield, CA 93301-2323 FAX: (661) 862-8601

COMMENTS ON NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE ALTA EAST WIND ENERGY PROJECT, ALTA WINDPOWER, LLC, KERN COUNTY, STATE CLEARINGHOUSE NO. 2011071051

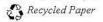
The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the above-referenced project (Project) on July 15, 2011. The proposed Project is a renewable energy development that would generate up to 360 megawatts of electricity through the use of wind power. The Project site total 3,200 acres and is located on land administered by both Kern County and Bureau of Land Management (BLM). It is our understanding that a joint environmental document to satisfy the requirements of both the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA) will be prepared for this Project. Our comments on the NOP and proposed development are outlined below.

Pursuant to CEQA guidelines, California Code of Regulations (CCR), title 14, section 15096, responsible agencies must specify the scope and content of the environmental information germane to their statutory responsibilities. Water Board staff, acting as a responsible agency, is providing these comments to help guide in the development of Project alternatives in an effort to maintain water quality and hydrologic function, and ultimately, for the protection of the beneficial use of waters of the State. We expect the County will value our position with respect to protecting and maintaining water quality within the Lahontan region, and request that the following comments be incorporated in the environmental review process.

#### **BASIN PLAN**

State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. The Water Quality Control Plan for the Lahontan Region (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect quality of waters of the State within the region. All groundwater

California Environmental Protection Agency



and surface waters are considered waters of the State. Surface waters include, but are not limited to, drainages, streams, washes, ponds, pools, or wetlands, and may be permanent or intermittent, either natural or manmade, and may or may not be identified as "blueline streams" on published topographic maps. All waters of the State are protected under California law. Additional protection is provided for waters of the U.S. under the Federal Clean Water Act (CWA). Based on our review of the NOP, Project components may involve alteration, dredging, filling, and/or excavating activities in waters of the State. Such activities constitute a discharge of waste<sup>1</sup>, as defined in California Water Code (CWC), section 13050, and could affect the quality of waters of the State.

The State Water Resources Control Board (State Water Board) and the Lahontan Water Board regulate discharges in order to protect the water quality and, ultimately, the beneficial uses of waters of the State. The Basin Plan provides guidance regarding water quality and how the Lahontan Water Board may regulate activities that have the potential to affect water quality within the region. The Basin Plan includes prohibitions, water quality standards, and policies for implementation of standards. The Basin Plan can be accessed via the Water Board's web site

(http://www.waterboards.ca.gov/lahontan/water\_issues/programs/basin\_plan/references .shtml). We request that the Project proponent comply with all applicable water quality standards and prohibitions, including provisions of the Basin Plan, for implementation of the proposed Project.

#### **ENVIRONMENTAL ANALYSES**

The environmental analysis must evaluate the Project's potential impact to environmental resources, including water quality and hydrology, and should include the following.

## **Project Alternatives**

The role of a DEIR is to evaluate a number of project alternatives and their potential impacts on environment resources, including hydrology and water quality, and to list specific mitigation measures that, when implemented, reduces those impacts to a less than significant level. At minimum, the alternatives evaluated in the DEIR must include a conceptual design for turbine pad locations, access road and utility line alignments, and ancillary facility locations. Alternative conceptual designs are critical to support mitigation measures proposed in the DEIR or to support the lead agency's determination with respect to level of significance, particularly for hydrology and water quality impacts. The Project alternative that is least environmentally damaging is often the preferred alternative (other than the no-build alternative). Should the Project proponent determine that the preferred alternative is one other than the least

California Environmental Protection Agency



<sup>&</sup>lt;sup>1</sup> "Waste" is defined in the Basin Plan to include any waste or deleterious material including, but not limited to, waste earthen materials (such as soil, silt, sand, clay, rock, or other organic or mineral material) and any other waste as defined in the California Water Code, section 13050(d).

environmentally damaging alternative, the rationale and justification for the additional environmental impacts must be included in the discussion sections of the DEIR.

## **Beneficial Uses**

Proposed Project components have the potential to involve alteration, dredging, filling, and/or excavating activities in waters of the State. The surface waters located within the vicinity of the Project site include Oak Creek, Cottonwood Creek, Cache Creek, and numerous unnamed washes, wetlands, springs, and other surface waters, which are identified in the Basin Plan as intermittent streams, minor surface waters, and minor wetlands. Beneficial uses, either past, present, or future, associated with these waterbodies include municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), groundwater recharge (GWR), freshwater replenishment (FRSH), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), warm freshwater habitat (WARM), cold freshwater habitat (COLD), wildlife habitat (WILD), water quality enhancement (WQE), and flood peak attenuation/flood water storage (FLD). Realignment, channelization, lining, and/or infilling of Oak Creek, Cottonwood Creek, or other surface waters may result in changes in the stream channel functions and may adversely affect these beneficial uses, particularly MUN, GWR, FRSH, WARM, and WILD.

The DEIR must include a regional-scale map identifying all surface water resources, both onsite and offsite (upstream and downstream), potentially affected by the Project. These water resources should be tabulated and organized by waterbody type and described in detail in the appropriate sections of the DEIR. We request that the DEIR identify and list the beneficial uses of the identified surface water resources, as outlined in the Basin Plan, and evaluate the Project's potential impacts to water quality with respect to those beneficial uses. The environmental document must include alternatives to avoid those impacts or list specific mitigation measures that, when implemented, minimize unavoidable impacts to a less than significant level.

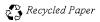
## **Avoidance and Minimization**

There are many ways a proposed Project can degrade water quality. Fortunately, avoiding or minimizing any step in a pollution pathway will eliminate or reduce subsequent effects and will simplify the associated needed analyses. Usually, a small number of key variables control most of the pathways causing water quality degradation. We strongly encourage avoidance as the primary strategy to address water quality concerns. The analyses should discuss any remaining impacts that cannot be avoided or further minimized and propose mitigations to reduce those impacts to a less than significant level.

## Characterization of Impacts

Avoidance is the best strategy for managing potential water quality impacts. For unavoidable impacts, understanding how pollution pathways will operate is essential to managing them. Please consider the following:

California Environmental Protection Agency



- Specify the causes, natures, and magnitudes of all proposed impacts. Provide a level of analysis commensurate with the size and complexity of the Project and its potential water quality impacts;
- Quantify impacts as definitively as feasible, using appropriate modeling and adequate data. Modeling approaches should be documented, and data deficiencies or other factors affecting the reliability of the results should be identified and characterized; and
- Identify whether impacts will be temporary or permanent.

## Hydrology

Because increased runoff from developed areas is a key variable driving a number of other adverse effects, attention to maintaining the pre-development hydrograph will prevent or minimize many problems and will limit the need for other analyses and mitigation. We request that the following be considered in the hydrological analysis for the Project.

- Evaluate alternatives and include mitigation measures to maintain the pre-project hydrograph;
- Evaluate the Project's potential hydromodification impacts on upstream and downstream reaches; and
- Provide a meaningful analysis of potential cumulative impacts to watershed hydrology from existing and other planned development in the watershed or planning area.

## **Habitat Connectivity**

Riparian corridors and other waters within the regulatory purview of the Water Board play an important role in maintaining habitat connectivity. Both aquatic and terrestrial habitat may be fragmented by impacts to streams, riparian areas, or other waters. For projects that have the potential to impact surface waters, we request that the following be included in the environmental document.

- Analyze the regional importance of movement corridors in and along waterbodies, the potential effect of disrupting such corridors, and the potential for enhancing such corridors through mitigation measures;
- Include information regarding any sensitive plant and animal species that likely utilize the corridors; and
- Identify any impacts to riparian or other waters that could compromise future remediation of existing connectivity barriers.

#### PERMITTING REQUIREMENTS

A number of activities associated with the proposed development may require permits issued by either the State Water Board or Lahontan Water Board because they appear to have the potential to impact waters of the State. The required permits may include:

- Land disturbance of more than 1 acre may require a CWA, section 402(p) stormwater permits, including a National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit, obtained from the State Water Board, or individual stormwater permit obtained from the Lahontan Water Board;
- Industrial activities may require an NPDES General Industrial Stormwater Permit, obtained from the State Water Board, or individual stormwater permit obtained from the Lahontan Water Board; and
- Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification (WQC) for impacts to federal waters (waters of the U.S.), or dredge and fill waste discharge requirements (WDRs) for impacts to non-federal waters, both issued by the Lahontan Water Board.

Some waters of the State are "isolated" from waters of the U.S. Determinations of the jurisdictional extent of the waters of the U.S. are made by the United States Army Corps of Engineers (USACE). Projects that have the potential to impact surface waters will require the appropriate jurisdictional determinations. These determinations are necessary to discern if the proposed surface water impacts will be regulated under section 401 of the CWA or through dredge and fill WDRs issued by the Water Board.

We request that the Project proponent consult with the USACE and perform the necessary jurisdictional determinations for surface waters within the Project area. In areas where USACE does not take jurisdiction, the Water Board generally delineates waters of the State based on distinct geomorphic flow indicators with or without clearly definable bed and bank features.

In addition, we request that the environmental document list the permits that may be required, as outlined above, and identify the specific activities that may trigger these permitting actions in the appropriate sections of the environmental document. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/.

#### STORMWATER MANAGEMENT

Post-construction stormwater management must be considered a significant component in the environmental review process. Of particular concern is the collection and concentration of stormwater runoff into channels and the discharge of that stormwater to natural drainage systems. Without adequate design, the consequences

of combining these flows will likely degradation to the existing natural drainage channel both upstream and downstream from the confluence. The environmental document must evaluate all potential stormwater impacts, particularly potential post-construction hydrologic impacts, and describe specific best management practices that, when implemented, will reduce those potential impacts to a less than significant level. Where feasible, we request that design alternatives be considered that direct captured runoff away from surface waters to areas where it will dissipate by percolation into the landscape. For example, a spreader system constructed at the downstream end of an engineered channel would act to return concentrated flows to sheetflow conditions.

#### CUMULATIVE IMPACTS TO WATERS OF THE STATE

Watersheds are complex natural systems in which physical, chemical, and biological components interact to create the beneficial uses of water. Poorly planned development and redevelopment upsets these natural interactions and degrades water quality through a network of interrelated effects. The primary impacts of poorly planned development and redevelopment projects on water quality are:

- Direct, indirect, and cumulative impacts plans must include a comprehensive analysis of the direct, indirect, and cumulative physical impacts of filling and excavation of wetlands, riparian areas, and other waters of the State, performed from the site to the watershed level:
- Pollutants the generation of pollutants during and after construction;
- Hydrologic modification the alteration of flow regimes and groundwater; and
- Watershed-level effects the disruption of watershed-level aquatic function, including pollutant removal, floodwater retention, and habitat connectivity.

These impacts have the potential to degrade water quality and impair a number of beneficial uses by reducing the available riparian habitat and eliminating the natural buffer system to filter runoff and enhance water quality. These impacts typically result in hydrologic changes by decreasing water storage capacity and increasing water flow velocity, which in turn leads to increases in the severity of peak discharges. These hydrologic changes may ultimately lead to near-total loss of natural functions and values, resulting in the increased need for engineered solutions to re-establish the disrupted flow patterns. Many examples of such degradation exist in California and elsewhere. The Water Boards are mandated to prevent such degradation.

Nearly two dozen wind energy projects either exist or are planned for the Tehachapi Wind Resource Area. The cumulative impacts of these projects on water quality and hydrology overtime must be fully evaluated in the DEIR. We urge the County to provide a thorough analysis of cumulative impacts in the environmental document. The analysis should consider the point impacts of all wind projects planned and constructed within the watershed and evaluate, at minimum, the potential impacts to groundwater recharge due to increased impervious surface and compacted soils, changes in the hydrology of the respective watershed(s) and potential flooding implications, and habitat

connectivity. The cumulative impacts analysis should identify both regional and projectspecific mitigation measures that, when implemented, will reduce potential impacts to a less than significant level.

Thank you for the opportunity to comment on the NOP. We look forwarding to reviewing the Draft Environmental Impact Report when it becomes available for review. If you have any questions regarding this letter, please contact me at (760) 241-7376 (jzimmerman@waterboards.ca.gov) or Patrice Copeland, Senior Engineering Geologist, at (760) 241-7404 (pcopeland@waterboards.ca.gov).

Sincerely,

Jan M. Zimmerman, PG

Engineering Geologist

CC:

State Clearinghouse (SCH No. 2011071051)

Jeff Childers, Bureau of Land Management

Dave Hacker, California Department of Fish and Game (San Luis Obispo)

Paul Amato, Wetlands Regulatory Office, USEPA, Region 9

(via email, Amato.Paul@epamail.epa.gov)

Bill Orme, State Water Resources Control Board, Division of Water Quality

JZ\rc\U:\CEQA Review\AltaEast\_NOP.doc





July 19, 2011

Kern County Planning Department 2700 "M" Street, Suite100 Bakersfield, CA 93301

Attn: Jacquelyn Kitchen, Planner III

Re: Alta East Wind Project

I have reviewed your Notice of Preparation Draft Environmental Impact Report for the Alta East Wind Project. The Southern California Gas Company currently does not have any Distribution facilities within the project site as shown on map page 2, figure 1, and as described on page 1 section 1.1 of the Alta East Wind Project Notice of Preparation document.

Thank You,

Mel Whiteaker Planning Associate Technical Services, North Region

Voice: 818-701-2565 Fax: 818-701-3380

E-mail: MWhiteaker@semprautilities.com

Southern California Gas Company

9400 Oakdale Avenue Chatsworth, CA 91313

Mailing Address: P. O. Box 2300 Chatsworth, CA 91313-2300 M.L.9331

tel 818-701-2565 fax 818-701-3380

## DEPARTMENT OF TRANSPORTATION

DISTRICT 9
500 SOUTH MAIN STREET
BISHOP, CA 93514
PHONE (760) 872-0785
FAX (760) 872-0754
TTY 711 (760) 872-0785
www.dol.ca.gov

BUREAU OF LAND MGMT.



11 AUG 15 PM 3: 44

MORENO VALLEY, CA

August 11, 2011

Jacquelyn R. Kitchen Kern County Planning/Community Development Department 2700 M Street, Suite 100 Bakersfield, California 93301-2323 File: KER IS/NOP DEIR/NOI EIS SCH #: 2011071051

Dear Ms. Kitchen:

Alta East Wind Energy Farm - Notice of Preparation of an Environmental Impact Report/Notice of Intent of an Environmental Impact Statement (GPA 2, CUP 7, Map 168)

The California Department of Transportation (Caltrans) District 9 appreciates the opportunity to comment on the proposed wind energy facility, northwest of the community of Mojave and straddling State Route 58 (SR-58). In the last several months we have been interacting with a project consultant - Gerry Mack of Terra-Gen Power, LLC. Please consider the following in project environmental analysis:

- The project could access SR-58 via the West-end Business Route 58 ramps and SR-14 via the Oak Creek Road Bridge/Mono St. intersection. Please evaluate project traffic and prepare a Construction Traffic Control Plan analyzing adequacy of the locations to be used. Consult Caltrans District 9 if improvements or traffic control will be necessary in State right-of-way. If so an encroachment permit must be obtained; any improvements must be built to Caltrans standards. Our Encroachment Permit Engineer Mark Reistetter may be contacted at (760) 872-0674 or mark.reistetter@dot.ca.gov.
- We understand that a service line would be necessary underneath SR-58 (and the rail road).
   A Caltrans Encroachment Permit is required for activity. Hence, "Section 1.6 Proposed Discretionary Actions/Required Approvals" should also list Caltrans District 9 for this work and the other potential items noted in the above paragraph.
- Ensure any damage done to public roadways is repaired to pre-construction phase conditions.
- As stated in the document, operational phase traffic would be minimal. However, during the
  operational phase, safety for SR-58 travelers must be addressed. Please evaluate possible
  turbine malfunction, which could cause components to fall into State highway right-of-way.
  (In May 2009, the California Highway Patrol had closed SR-58 due to "Wind Turbine
  Danger.") Consider a turbine offset distance from the highway, incident prevention via
  turbine inspection/maintenance, and liability.

Ms. Jacqueln Kitchen August 11, 2011 Page 2

 The South Region Transportation Permits Office issues oversized vehicle permits: Phone: (909) 383-4637 or link: <a href="http://www.dot.ca.gov/hq/traffops/permits/contact.htm">http://www.dot.ca.gov/hq/traffops/permits/contact.htm</a>

We value a cooperative working relationship regarding project impacts upon State highways in eastern Kern County. I may be contacted at (760) 872-0785, with any questions.

Sincerely,

GAYLE J. ROSANDER IGR/CEQA Coordinator

State Clearinghouse
 Jeff Childers, Bureau of Land Management
 Steve Wisniewski, Caltrans

Department of Transportation District 9 500 South Main Street Bishop, California 93514

> Mr. Jeff Childers Bureau of Land i 22835 Calle San Moreno Valley, (

Mr. Jeffery Childers Planning and Environment of the BLM

As I write you this letter, it is 1:30 a.m. Once again, I am awakened by another night of overwhelming feelings of anxiety and hopelessness. My husband and I built our costume ranch style home on five acres here in Mojave. For years we saved, planned, and built this home amid criticism as to why we would put everything we have into a little isolated town like Mojave.

We chose to live here for a variety of reasons. One, being the visual beauty of the quiet desert complete with dark night skies, wildlife and the ability to enjoy miles of open land to explore with our children. This was the trade off. We gave up the "convences of life" for solitude and peace.

For years wind energy has been part of our lives and we have never opposed that. Now, that resource is being sought after in the most aggressive way yet. Endless miles of multiple wind farms threaten our quiet peaceful way of living. I feel that our family has compromised and yet we are being forced to compromise in even a greater way. Wind farms are overzealous and raping our deserts. We alone are facing the loss of over 17,000 acres (10,800 Alta Wind Infill II, 3,200 Alta East, 3,300 Rising Tree) of land and mile after mile of fencing just to the west and northwest of our home. Some of which can come as close as 900 yards from our back fence.

I would like to ask the Kern County Planning Commission put a nonnegotiable barrier between residents, towns, and communities within Kern County. I propose a two mile radius be in place throughout the County of Kern thus protecting home values, safety, and the preservation of chosen life styles. I like to think of it as a sort of "green belt". This idea would put an end to community outcry throughout east kern and ease up the agendas of town council meetings, town halls, and other such meetings.

I would like to invite you to come visit our family, our home and see for yourself the true impact this amount of wind farms will have on our lives and the community of Mojave. I feel like this is a classic example of, "too much of a good thing". None of us know the long term effect of epic sized wind farms of this magnitude will have over the years and I would hate for Kern County to be the example of what not to do.

Thank you,

Deborah Crocoll 16329 Koch Street Mojave, CA 93501 (661) 824-9536

local Cocall

LIEX CALL

TH AUG 15 PM 3:44



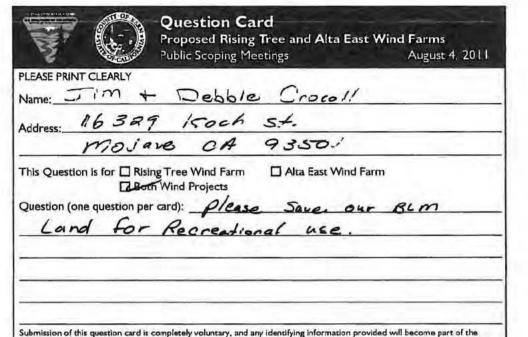












public record, and as such must be released to any individual upon request. Request to withhold comments and associated

Deborah Crocoll |6329 Koch Street Mojave, CA 93501

personal identifying information from public review cannot be guaranteed.

SAN

M Et

Jeffe Plan 2283 More

# Office Memorandum

## **KERN COUNTY -**

To: Planning Department August 12, 2011

Attn: Jacquelyn Kitchen

From: Engineering Survey Services Dept. Phone: 862-5093

Floodplain Management Section

Aaron Leicht

Subject: NOP of DEIR – Alta East Wind Energy project

This Section has reviewed the Notice of Preparation of the Draft EIR for Alta East Wind Energy project and finds that the proposed evaluation of drainage impacts and geotechnical issues related to the project is sufficient to address this Departments concerns.





11 AUG 18 PM 2: 00

MORENO VALLEY, CA

August 15, 2011

Mr. Jeff Childers, Planning & Environmental Coordinator CDDO – RECO Bureau of Land Management 22835 Calle San Juan De Los Lagos Moreno Valley, California 92553

Ms. Jacquelyn Kitchen, Planner III
Kern County Planning and Community Development Department
2700 "M" Street, Suite 100
Bakersfield, California 93301

RE: Notice of Preparation (NOP)/Notice of Intent (NOI) of a Draft Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) for the Alta East Wind Project by Alta Windpower Development, LLC

Dear Mr. Childers and Ms. Kitchen:

Southern California Edison (SCE) appreciates the opportunity to review and provide comment on the NOP/NOI of a Draft EIR/EIS for the Alta East Wind Project ("project") by Alta Windpower Development, LLC ("project proponent"). SCE understands that Kern County and the U.S. Bureau of Land Management will prepare a joint EIR/EIS for this project. The project is described as a renewable energy development that would generate up to 360 megawatts of electricity using wind power on a 3,200-acre project site. The project would be located two miles west of the intersection of Highway 58 and Highway 14 in the Mojave Desert and within the Tehachapi Wind Resource Area of eastern Kern County

The NOP/NOI indicates that the project would interconnect to the SCE Windhub Substation via a single 230-kilovolt (kV) transmission line from two potential route options. As you know, interconnection of this project into the California Independent Systems Operator (CAISO)-Controlled Grid is established through an application process conducted under the rules and tariffs of CAISO. SCE is continuing to engineer and design the interconnection facilities required for this project pursuant to an engineering, design and procurement letter agreement entered into by Alta Windpower Development, LLC and SCE. Accordingly, SCE will work closely with the project proponent and the County throughout the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) and development review process to provide additional details of required interconnection facilities to interconnect the project into SCE's transmission system.

Based on SCE's initial studies, interconnection of this project would require SCE to construct a portion of the transmission line identified in the NOP/NOI at Windhub Substation. SCE suggests that these activities be

clearly described and analyzed in the Draft EIR/EIS, such as construction of access roads and foundations associated with the transmission line.

Although the text of the NOP/NOI identifies transmission interconnection to Windhub Substation, it does not appear that Figure 6 depicts the entire routes of the transmission line options to Windhub Substation. Please provide clarification on the routes to Windhub Substation in the Draft EIR/EIS.

Interconnection of the project would also require diverse communication routes from the project area to Windhub Substation. SCE suggests that activities related to construction of the diverse communication routes to Windhub Substation be clearly described and analyzed in the Draft EIR/EIS.

Please note that as the project description and interconnection studies indicate the need for SCE to build new or relocate existing electrical facilities that operate at or above 50 kV, the SCE construction may have environmental consequences subject to CEQA review as required by the California Public Utilities Commission (CPUC) and under NEPA as required under the Federal Land Policy and Management Act (FLPMA). If those environmental consequences are identified and addressed by the Lead Agency in the CEQA/NEPA processes for the larger project, SCE may not be required to pursue a later, separate mandatory CEQA review through the CPUC's General Order 131-D process. If the SCE facilities are not adequately addressed in the Draft EIR, the required additional CEQA review could delay the power portion of the project for two years or longer.

Again, thank you for the opportunity to review and provide comment on the NOP//NOI for this project. If you have any questions regarding this letter, do not hesitate to contact me at (661) 726-5608.

Sincerely,

Deborah Hess

Dehorah Hen

Local Public Affairs Region Manager Southern California Edison Company



42060 10th Street West Languster, CA 91534



## կիրկերկերոնիությերինիրուկիիվուներիկի

Mr. Jeff Childers, Planning & Environmental Coordinator CDDO – RECO
Bureau of Land Management
22835 Calle San Juan De Los Lagos
Moreno Valley, California 92553



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street San Francisco, CA 94105

AUG 1 5 2011

Jeffery Childers, Project Manager California Desert District Office, BLM 22835 Calle San Juan De Los Lagos Moreno Valley, California 92553-9046 BURE AN OF LAND MGMT

Subject: Notice of Intent to Prepare an Environmental Impact Statement, and Possible Land Use Amendment to the California Desert Conservation Area Plan, for the Proposed Alta East Wind Project, Kern County, California

Dear Mr. Childers:

The U.S. Environmental Protection Agency has reviewed the July 15, 2011 Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Alta East Wind Project, Kern County, California, which may include an amendment to the California Desert Conservation Area Plan. Our comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and our NEPA review authority under Section 309 of the Clean Air Act.

The EPA supports increasing the development of renewable energy resources, as recommended in the National Energy Policy Act of 2005. Using renewable energy resources such as wind power can help the nation meet its energy requirements while reducing greenhouse gas emissions. To assist in the scoping process for this project, we have identified several issues for your attention in the preparation of the EIS. The proposed project would be located within the Tehachapi Wind Resources Area in the Western Mojave Desert of eastern Kern County. We are most concerned about direct and cumulative impacts to aquatic and biological resources, including threatened and endangered species, associated with the multitude of approved and proposed large-scale wind projects in the immediate vicinity of the Alta East Wind Project.

We appreciate the opportunity to review this NOI and are available to discuss our comments. Please send one hard copy of the Draft EIS and one CD ROM copy to this office at the same time it is officially filed with our Washington D.C. Office. If you have any questions, please contact me at (415) 972-3238, or plenys.thomas@epa.gov.

Sincerely,

Tom Plenys

Environmental Review Office

Communities and Ecosystems Division

Enclosure: EPA's Detailed Comments

US EPA DETAILED COMMENTS ON THE NOTICE OF INTENT TO PREPARE AN ENVIRONMENTAL IMPACT STATEMENT, AND POSSIBLE LAND USE AMENDMENT TO THE CALIFORNIA DESERT CONSERVATION AREA PLAN, FOR THE PROPOSED ALTA EAST WIND PROJECT, KERN COUNTY, CALIFORNIA, AUGUST 15, 2011

## **Project Description**

Alta Windpower Development LLC has submitted a right-of-way application to the Bureau of Land Management to build the Alta East Wind Project that would generate 300 megawatts of electricity using wind resources. The proposed project would include up to 120 wind turbine generators, a substation, transmission interconnection to the Southern California Edison Windhub Substation, access roads, and ancillary facilities.

THEY I THE

The project area comprises 3,200 acres, 2,083 of which are on public land under the jurisdiction of the Bureau of Land Management three miles northwest of the unincorporated town of Mojave in southeastern Kern County, California.

Authorization of this proposal may require an amendment to the California Desert Conservation Area Plan. If a land use plan amendment is necessary, BLM intends to integrate the land use planning process with the National Environmental Policy Act process for this project.

## Statement of Purpose and Need

The Draft Environmental Impact Statement should clearly identify the underlying purpose and need to which the BLM is responding in proposing the alternatives (40 CFR 1502.13). The *purpose* of the proposed action is typically the specific objectives of the activity, while the *need* for the proposed action may be to eliminate a broader underlying problem or take advantage of an opportunity.

#### Recommendation:

The purpose and need should be a clear, objective statement of the rationale for the proposed project. The DEIS should discuss the proposed project in the context of the larger energy market that this project would serve and discuss how the project will assist the state in meeting its renewable energy portfolio standards and goals.

#### Alternatives Analysis

The National Environmental Policy Act requires evaluation of reasonable alternatives, including those that may not be within the jurisdiction of the lead agency (40 CFR Section 1502.14(c)). A robust range of alternatives will include options for avoiding significant environmental impacts. The DEIS should provide a clear discussion of the reasons for the elimination of alternatives which are not evaluated in detail. Reasonable alternatives should include, but are not necessarily limited to, alternative sites, capacities, and technologies as well as alternatives that identify environmentally sensitive areas or areas with potential use conflicts. The alternatives analysis should describe the approach used to identify environmentally sensitive areas and describe the process that was used to designate them in terms of sensitivity (low, medium, and high).

The environmental impacts of the proposal and alternatives should be presented in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public (40 CFR 1502.14). The potential environmental impacts of each alternative should be quantified to the greatest extent possible (e.g., acres of pristine desert impacted, tons per year of emissions produced).

## Recommendations:

The DEIS should describe how each alternative was developed, how it addresses each project objective, and how it will be implemented. The alternatives analysis should include a discussion of alternative sites, capacities, and generating technologies, including different types of renewable energy technologies, and describe the benefits associated with the proposed technology.

The DEIS should clearly describe the rationale used to determine whether impacts of an alternative are significant or not. Thresholds of significance should be determined by considering the context and intensity of an action and its effects (40 CFR 1508.27).

The EPA recommends that the DEIS identify and analyze an environmentally preferred alternative. This alternative should consider options such as downsizing the proposed project within the project area and/or relocating sections/components of the project in other areas, including private land, to reduce environmental impacts.

The EPA strongly encourages BLM and other interested parties to pursue the siting of renewable energy projects on disturbed, degraded, and contaminated sites, including fallow or abandoned agricultural lands, as appropriate, before considering large tracts of undisturbed public lands.

The DEIS should describe the current condition of the land selected for the proposed project, discuss whether the land is classified as disturbed, and describe to what extent the land could be used for other purposes.

The EPA recommends that BLM utilize the Renewable Energy Interactive Mapping Tool to explore whether there are disturbed sites located in proximity to the proposed project that might also be utilized.<sup>1</sup>

## Water Resources

Water Supply and Water Quality

Public drinking water supplies and/or their source areas often exist in many watersheds. Source water is water from streams, rivers, lakes, springs, and aquifers that is used as a supply of drinking water. Source water areas are delineated and mapped by the state for each federally-regulated public water system. The 1996 amendments to the Safe Drinking Water Act require federal agencies to protect sources of drinking water for communities. Therefore, the EPA recommends that the DEIS identify:

<sup>&</sup>lt;sup>1</sup> See EPA's Re-Powering America's Land site at: http://www.epa.gov/renewableenergyland/mapping\_tool.htm. Open the Renewable Energy Interactive Map (KMZ) to launch the Renewable Energy Mapping Tool. More detailed information on the EPA tracked sites is available at: http://epa.gov/renewableenergyland/maps/ocpa\_renewable\_energy\_data.xls.

- A discussion of the amount of water needed for the proposed project and where this water will be obtained.
- A discussion of availability of groundwater within the basin and annual recharge rates. A
  description of the water right permitting process and the status of water rights within that basin,
  including an analysis of whether water rights have been over-allocated.
- A discussion of cumulative impacts to groundwater supply within the hydrographic basin, including impacts from other large-scale wind installations that have also been proposed.
- An analysis of different types of technology that can be used to minimize or recycle water.
- A discussion of whether it would be feasible to use other sources of water, including potable water, irrigation canal water, wastewater or deep-aquifer water.
- An analysis of the potential for alternatives to cause adverse aquatic impacts such as impacts to water quality and aquatic habitats.

The DEIS should address the potential effects of project discharges, if any, on surface water quality. Specific discharges should be identified and potential effects of discharges on designated beneficial uses of affected waters should be analyzed. If the facility is a zero discharge facility, the DEIS should disclose the amount of process water that would be disposed of onsite and explain methods of onsite containment.

The EPA strongly encourages the BLM to include in the DEIS a description of all water conservation measures that will be implemented to reduce water demands. Project designs should maximize conservation measures such as appropriate use or recycled water for landscaping and industry, xeric landscaping and water conservation education.

In addition, the DEIS should describe water reliability for the proposed project and clarify how existing and/or proposed sources may be affected by climate change. At a minimum, EPA expects a qualitative discussion of impacts to water supply and the adaptability of the project to these changes.

Large turbines require substantial foundations and associated structural and geotechnical engineering considerations. The substantial amount of concrete typically used in foundations for large wind turbines requires a large amount of cement, sand, and aggregate. A typical 1.5 MW wind turbine generator can require up to 6,500 gallons of water for each turbine foundation mixture.

#### Recommendation:

The DEIS should describe the availability of a water supply for construction and operation of the proposed project and fully evaluate the environmental impacts associated with using the selected water supply.

#### Clean Water Act Section 404

The project applicant should coordinate with the U.S. Army Corps of Engineers to determine if the proposed project requires a Section 404 permit under the Clean Water Act. Section 404 regulates the discharge of dredged or fill material into waters of the United States, including wetlands and other *special aquatic sites*. The DEIS should describe all WOUS that could be affected by the

project alternatives, and include maps that clearly identify all waters within the project area. The discussion should include acreages and channel lengths, habitat types, values, and functions of these waters. In addition, EPA suggests that the BLM include a jurisdictional delineation for all WOUS, including ephemeral drainages, in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and the December 2006 Arid West Region Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. A jurisdictional delineation will confirm the presence of WOUS in the project area and help determine impact avoidance or if state and federal permits would be required for activities that affect WOUS.

If a permit is required, EPA will review the project for compliance with Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA ("404(b)(1) Guidelines"). Pursuant to 40 CFR 230, any permitted discharge into WOUS must be the least environmentally damaging practicable alternative (LEDPA) available to achieve the project purpose. The DEIS should include an evaluation of the project alternatives in this context in order to demonstrate the project's compliance with the 404(b)(1) Guidelines. If, under the proposed project, dredged or fill material would be discharged into WOUS, the DEIS should discuss alternatives to avoid those discharges.

The DEIS should describe the original (natural) drainage patterns in the project locale, as well as the drainage patterns of the area during project operations, and identify whether any components of the proposed project are within a 50 or 100-year floodplain. We also recommend the DEIS include information on the functions and locations of WOUS, as well as ephemeral washes in the project area, because of the important hydrologic and biogeochemical role these washes play in direct relationship to higher-order waters downstream.

## Clean Water Act Section 303(d)

The CWA requires States to develop a list of impaired waters that do not meet water quality standards, establish priority rankings, and develop action plans, called Total Maximum Daily Loads, to improve water quality.

#### Recommendation:

The DEIS should provide information on CWA Section 303(d) impaired waters in the project area, if any, and efforts to develop and revise TMDLs. The DEIS should describe existing restoration and enhancement efforts for those waters, how the proposed project will coordinate with on-going protection efforts, and any mitigation measures that will be implemented to avoid further degradation of impaired waters.

## Drainages, Ephemeral Washes, and Floodplains

The DEIS should consider the up-and-downstream reach and extent of waters and their importance in this landscape. Natural washes perform a diversity of hydrologic, biochemical, and geochemical functions that directly affect the integrity and functional condition of higher-order waters downstream. Healthy ephemeral waters with characteristic plant communities control rates of sediment deposition and dissipate the energy associated with flood flows. Ephemeral washes also provide habitat for breeding, shelter, foraging and movement of wildlife. Many plant populations are dependent on these aquatic ecosystems and adapted to their unique conditions. The potential damage that could result from disturbance of flat-bottomed washes includes alterations to the hydrological functions that natural

channels provide in arid ecosystems, such as adequate capacity for flood control, energy dissipation and sediment movement; as well as impacts to valuable habitat for desert species.

#### Recommendations:

The EPA recommends that the DEIS characterize the functions of any aquatic features that could be affected by the proposed project and are determined not to constitute waters of the U.S. and discuss potential mitigation.

To avoid and minimize direct and indirect impacts to desert washes (such as erosion, migration of channels and local scour), as applicable:

- Utilize existing natural drainage channels on site and more natural features, such as earthen berms or channels, rather than concrete-lined channels.
- Commit to the use of natural washes, in their present location and natural form and including adequate natural buffers, for flood control to the maximum extent practicable.

Discuss the availability of sufficient compensation lands within the project's watershed to replace desert wash functions lost on the Project site.

#### Construction Stormwater Discharge Permit

The Notice of Intent does not state the total disturbance for the project. Given the scope of this project, it is anticipated that the project will disturb more than one acre of soil during the construction phase. Lack of vegetation and periodic disturbance due to maintenance in these areas would potentially increase sedimentation and decrease water quantity.

The California State Water Resources Control board requires owner/operators to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity if the project will disturb more than one acre of soil. Given the disturbance area for this project, California State Water Resources Control Board General Permit associated with construction activity - Construction General Permit Order 2009-0009-DWQ - would likely be required. Additionally, a Stormwater Pollution Prevention Plan, that includes erosion control measures, would need to be generated for the project and implemented on-site.

The SWPPP would include the elements described in the Construction General Permit, including a site map(s) showing the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP also would list Best Management Practices, including erosion control BMPs that would be used to protect stormwater runoff, and include a description of required monitoring programs.

Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. Guidance from other documents, such as the EPA document entitled "Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites" also could be used in the development of the SWPPP.

#### Recommendation:

The EPA recommends that the applicant determine the need for a California State Water Resources Control Board General Permit associated with construction activity Construction General Permit Order 2009-0009-DWQ. If such a permit is required, include a description of the proposed stormwater pollution control and mitigation measures in the DEIS.

## Biological Resources and Habitat

During construction of the proposed project, vegetation would be cleared and soils moved during the construction of roads, wind turbine foundations, and other facilities. The DEIS should describe the current quality and capacity of habitat and its use by wildlife in the proposed project area, including golden eagles and condors, as well as other avian species including bats. The DEIS should describe the critical habitat for the species; identify any impacts the proposed project will have on the species and their critical habitats; and how the proposed project will meet all requirements under the Endangered Species Act, including consultation with the U.S. Fish and Wildlife Service and California Department of Fish and Game.

Wind energy generation projects have the potential to disrupt important wildlife species habitat, resulting in mortality of migratory species such as birds and bats due to collisions with rotors. The DEIS should consider whether migratory birds are likely to use the project area and avoid, if possible: 1) areas supporting a high density of wintering or migratory birds, 2) areas with high level of raptor activity, and 3) breeding, wintering or migrating populations of less abundant species which may be sensitive to increased mortality as a result of collision.

A comprehensive monitoring program should be designed to evaluate impacts on bats and avian species. We suggest that the BLM conduct pre-construction baseline surveys to evaluate the site for its importance to bats and avian species, as well as post-construction surveys to determine the extent of mortalities and to determine the effectiveness of mitigation measures. Surveys should be conducted by a qualified biologist during the appropriate time of year. BLM actions should promote the recovery of declining populations of species. Collision risk depends on a range of factors related to species, numbers and behavior, weather conditions, topography, and lighting. The DEIS should identify and describe specific turbine types and their operating characteristics and consider turbine design standards that minimize adverse impacts to wildlife, particularly birds and bats. Consideration should be given to reducing the perching and nesting opportunities, which may help reduce potential collisions.

The DEIS should identify all petitioned and listed threatened and endangered species that might occur within the project area. The DEIS should identify and quantify which species might be directly or indirectly affected by each alternative. The DEIS should discuss the potential for habitat fragmentation and impediments to wildlife movements which are among the greatest threats to desert communities and species, and that maximizing habitat connectivity is essential to climate change adaptation<sup>2</sup>. The California Condor is listed as an endangered species under the Federal Endangered Species Act and is also fully protected pursuant to Fish and Game Code, Section 3511. All raptor and owl species are protected under the Migratory Bird Treaty Act. The golden eagle and bald eagle also receive protection

<sup>&</sup>lt;sup>2</sup> Recommendations of Independent Science Advisors for the California Desert Renewable Energy Conservation Plan, DRECP Independent Science Advisors, October, 2010,

under the Bald and Golden Eagle Protection Act. The MBTA, however, has no provision for allowing unauthorized take. In September 2009, the FWS finalized permit regulations<sup>3</sup> under the BGEPA for the take of bald and golden eagles on a limited basis, provided that the take is compatible with preservation of the eagle and cannot be practicably avoided. The final rule states that if advanced conservation practices can be developed to significantly reduce take, the operator of a wind-power facility may qualify for a programmatic take permit. Most permits under the new regulations would authorize disturbance, rather than take. In February 2011 FWS issued Draft Eagle Conservation Plan Guidance which provides additional background information necessary for wind energy project proponents to prepare an Eagle Conservation Plan that will assess the risk of their project(s) to eagles and how siting, design, and operational modifications can mitigate that risk.

## Recommendations:

Design a comprehensive monitoring program to evaluate impacts on bats and avian species, and discuss design and management measures to minimize adverse impacts to wildlife and native and rare plants.

Identify specific measures to reduce impacts to eagles and clarify how the proposed project will comply with the MBTA and BGEPA.

Commit to additional data collection/analysis to identify areas that are important to bald and golden eagles to ensure proper siting and avoid take of these species.

Consider site specific risk mapping for avian species of concern as a means to site individual wind turbines in lower risk areas. An example of this type of study was performed at the Altamont Wind Resource Area. This study was funded by the California Energy Commission's Public Interest Energy Research program.

Discuss the applicability of the recently finalized FWS permit regulations (50 CFR parts 13 and 22) to the proposed project. Elaborate on process and/or likelihood of obtaining a permit via these regulations.

Discuss in the DEIS the applicability of the recent Eagle Conservation Plan Guidelines to the proposed project. Elaborate on siting, design, and operational modifications that will mitigate impacts.

The DEIS should describe the potential for habitat fragmentation and obstructions for wildlife movement.

If alternatives cannot be developed that avoid the take of eagles, develop an operational monitoring and adaptive management plan to address this issue.

<sup>&</sup>lt;sup>3</sup> See Eagle Permits, 50 CFR parts 13 and 22, issued Sept. 11, 2009. See internet address: http://www.fws.gov/migratorybirds/CurrentBirdIssues/BaldEagle/Final%20Disturbance%20Rule%209%20Sept%202009.pdf
<sup>4</sup> Smallwood, K. S., and L. Neher. 2008. Map-Based Repowering of the Altamont Pass Wind Resource Area Based on Burrowing Owl Burrows, Raptor Flights, and Collisions with Wind Turbines. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2009-065.

Determine if the proposed project is within the existing or historical ranges of the California condor or have the potential to impact future expanded populations and consult with FWS and CDFG early in the process.

Indicate what mitigation measures will be taken to protect important wildlife habitat areas from potential adverse effects of proposed covered activities.

Discuss mechanisms in the DEIS that would: 1) protect into perpetuity any compensatory mitigation lands that are selected; and 2) exclude the non-developed portion of a subject ROW from further disturbance or development.

The DEIS should include the requirement for the owner to provide financial assurance for any required mitigation projects. Such assurances can be provided by third-party institutions, such as surety bonding companies, insurance companies, banks and other financial institutions that agree to hold themselves financially liable for the failure of a responsible party to perform compensatory mitigation obligations.

The US Fish and Wildlife Service published on March 4, 2010 a set of guidelines and recommendations<sup>5</sup> on how to avoid and minimize impacts of land-based wind farms on wildlife and habitat. Further revisions and clarifications were published in February 2011 in the Draft Voluntary Land-Based Wind Energy Guidelines.<sup>6</sup> The document was prepared by the Wind Turbine Guidelines Advisory Committee and contains both policy recommendations and recommended voluntary guidelines for siting and operating wind energy projects in order to avoid or minimize potential impacts to wildlife and habitat.

The Committee's Guidelines utilize a "tiered approach" to assess potential impacts to wildlife and their habitats. The five tiers include: 1) preliminary evaluation or screening of sites; 2) site characterization; 3) field studies to document site wildlife conditions and predict project impacts; 4) post-construction fatality studies; and 5) other post-construction studies. The Committee's Guidelines provide a consistent methodology for conducting pre-construction risk assessments and post-construction impact assessments to guide siting decisions by developers and agencies. Furthermore, the Guidelines address all elements of a wind energy facility, including the turbine string or array, access roads, ancillary buildings, and the above-and below-ground electrical lines which connect a project to the transmission system.

#### Recommendations:

Discuss, in the DEIS, the applicability of the recent Land-Based Wind Energy Guidelines to the proposed project. Elaborate on siting, design, and operational modifications that will mitigate impacts.

Consider utilizing unique types of radar technology to monitor for bird and bats.<sup>7</sup>

<sup>&</sup>lt;sup>5</sup> U.S. Fish and Wildlife Service Wind Turbine Guidelines Advisory Committee Recommendations, submitted to the Secretary of the Interior by the U.S. Fish and Wildlife Service, March 4, 2010. See Internet address: http://www.fws.gov/habitatconservation/windpower/Wind\_Turbine\_Guidelines\_Advisory\_Committee\_Recommendations\_Secretary.pdf

<sup>&</sup>lt;sup>6</sup> U.S. Fish and Wildlife Service Draft Land-Based Wind Energy Guidelines, February 8, 2011, See Internet address: http://www.fws.gov/windenergy/

For example, see http://www.detect-inc.com/avian.html and http://www.upi.com/Science\_News/Resource-

Consider a tactical shut down option during critical hours of species activity, as appropriate, to minimize adverse impacts on such species.

Consider blade feathering/idling (including on-the-spot and seasonal shutdowns), reducing cut-in speeds, and adjusting turbine speeds during strategic intervals to reduce take and to prevent mortality.

## Invasive Species

Executive Order 13112, *Invasive Species* (February 3, 1999), mandates that federal agencies take actions to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause. Executive Order 13112 also calls for the restoration of native plants and tree species. If the proposed project will entail new landscaping, the DEIS should describe how the project will meet the requirements of Executive Order 13112.

#### Recommendation:

The DEIS should include an invasive plant management plan to monitor and control noxious weeds.

## Cumulative and Indirect Impacts

The cumulative impacts analysis should identify how resources, ecosystems, and communities in the vicinity of the project have already been affected by past or present activities in the project area. Characterize these resources in terms of their response to change and capacity to withstand stresses. Trends data should be used to establish a baseline for the affected resources, to evaluate the significance of historical degradation, and to predict the environmental effects of the project components.

For the cumulative impacts assessment, we recommend focusing on resources of concern or resources that are "at risk" and/or are significantly impacted by the proposed project, before mitigation. For this project, the BLM should ensure that a thorough assessment of the cumulative impacts to bird and bat species is included, especially in the context of the larger wind power developments occurring nearby including, but not limited to, the Alta Wind Energy Center, PdV/Manzana Wind, Catalina Wind Energy Project, Pacific Wind and the Antelope Valley Wind Farm. In general, individual projects may not significantly affect bird or bat populations, but the BLM should look at cumulative impacts based upon the avian and bat fatalities accumulating under all future wind development scenarios in the Tehachapi area. Based on Kern County's projections, at least 10 additional proposed wind projects in the immediate vicinity could result in development of an additional 2,000 MW of wind energy power.<sup>8</sup>

EPA assisted in the preparation of a guidance document for assessing cumulative impacts and we recommend consideration of its use for the DEIS. While this guidance was prepared for transportation projects in California, the principles and the 8-step process outlined therein can be applied to other types

Wars/2010/03/18/Radar-reduces-wind-farm-risk-to-birds/UPI-71441268920323/. These resources are provided as examples only and do not constitute endorsement of any particular product by EPA.

8See http://www.co.kern.ca.us/planning/pdfs/renewable/wind\_projects.pdf

of projects and offers a systematic way to analyze cumulative impacts for a project. The guidance is available at: http://www.dot.ca.gov/ser/cumulative\_guidance/purpose.htm. In the introduction to the *Cumulative Impacts Section*, identify which resources are analyzed, which ones are not, and why. For each resource analyzed, the DEIS should:

- Identify the current condition of the resource as a measure of past impacts. For example, the
  percentage of species habitat lost to date.
- Identify the trend in the condition of the resource as a measure of present impacts. For example, the health of the resource is improving, declining, or in stasis.
- Identify all on-going, planned, and reasonably foreseeable projects in the study area that may contribute to cumulative impacts.
- Identify the future condition of the resource based on an analysis of impacts from reasonably foreseeable projects or actions added to existing conditions and current trends.
- Assess the cumulative impacts contribution of the proposed alternatives to the long-term health of the resource, and provide a specific measure for the projected impact from the proposed alternatives.
- When cumulative impacts are identified for a resource, mitigation should be proposed.
- Disclose the parties that would be responsible for avoiding, minimizing, and mitigating those adverse impacts.
- Identify opportunities to avoid and minimize impacts, including working with other entities.

#### Recommendations:

The DEIS should consider the cumulative impacts associated with multiple large-scale renewable energy projects proposed in the western Mojave desert/Tehachapi area and the potential impacts on various resources including: water supply, endangered species, and habitat.

The BLM and project proponents should consider a regional assessment of resource impacts, including cumulative impacts to avian and bat populations, given the large number of wind energy projects either built or planned for the region.

The DEIS should discuss the adequacy of the current and future transmission line capacity for all the regional wind projects and whether the capacity can accommodate the multiple proposed wind projects slated for operation.

As an indirect result of providing additional power, it can be anticipated that these projects will allow for development and population growth to occur in those areas that receive the generated electricity.

#### Recommendation:

The DEIS should describe the reasonably foreseeable future land use and associated impacts that will result from the additional power supply. The document should provide an estimate of the amount of growth, its likely location, and the biological and environmental resources at risk.

## Climate Change

Scientific evidence supports the concern that continued increases in greenhouse gas emissions resulting from human activities will contribute to climate change. Global warming is caused by emissions of carbon dioxide and other heat-trapping gases. On December 7, 2009, the EPA determined that emissions

of GHGs contribute to air pollution that "endangers public health and welfare" within the meaning of the Clean Air Act. One report indicates that observed changes in temperature, sea level, precipitation regime, fire frequency, and agricultural and ecological systems reveal that California is already experiencing the measurable effects of climate change. The report indicates that climate change could result in the following changes in California: poor air quality; more severe heat; increased wildfires; shifting vegetation; declining forest productivity; decreased spring snowpack; water shortages; a potential reduction in hydropower; a loss in winter recreation; agricultural damages from heat, pests, pathogens, and weeds; and rising sea levels resulting in shrinking beaches and increased coastal floods.

#### Recommendations:

The DEIS should consider how climate change could potentially influence the proposed projects, specifically within sensitive areas, and assess how the projected impacts could be exacerbated by climate change.

The DEIS should quantify and disclose the anticipated climate change *benefits* of wind energy. We suggest quantifying greenhouse gas emissions from different types of generating facilities including solar, geothermal, natural gas, coal-burning, and nuclear and compiling and comparing these values.

## Air Quality

The DEIS should provide a detailed discussion of ambient air conditions (baseline or existing conditions), National Ambient Air Quality Standards, criteria pollutant nonattainment areas, and potential air quality impacts of the proposed projects (including cumulative and indirect impacts). Such an evaluation is necessary to assure compliance with State and Federal air quality regulations, and to disclose the potential impacts from temporary or cumulative degradation of air quality.

The DEIS should describe and estimate air emissions from potential construction and maintenance activities, as well as proposed mitigation measures to minimize those emissions. EPA recommends an evaluation of the following measures to reduce emissions of criteria air pollutants and hazardous air pollutants (air toxics).

#### Recommendations:

- Existing Conditions The DEIS should provide a detailed discussion of ambient air conditions, National Ambient Air Quality Standards, and criteria pollutant nonattainment areas in all areas considered for wind development.
- Quantify Emissions The DEIS should estimate emissions of criteria pollutants from the
  proposed projects and discuss the timeframe for release of these emissions over the lifespan
  of the projects. The DEIS should describe and estimate emissions from potential construction
  activities, as well as proposed mitigation measures to minimize these emissions.

Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071.

- Specify Emission Sources The DEIS should specify the emission sources by pollutant from mobile sources, stationary sources, and ground disturbance. This source specific information should be used to identify appropriate mitigation measures and areas in need of the greatest attention.
- Construction Emissions Mitigation Plan The DEIS should include a Construction
   Emissions Mitigation Plan. In addition to all applicable local, state, or federal requirements,
   the EPA recommends that the following mitigation measures be included in the Construction
   Emissions Mitigation Plan in order to reduce impacts associated with emissions of particulate
   matter and other toxics from construction-related activities:
  - Fugitive Dust Source Controls: The DEIS should identify the need for a Fugitive Dust Control Plan and how that plan will comply with the Eastern Kern County Air Pollution Control District Rule 402 for control of fugitive dust emissions. We recommend that the plan include these general commitments:
    - Stabilize heavily used unpaved construction roads with a non-toxic soil stabilizer or soil weighting agent that will not result in loss of vegetation, or increase other environmental impacts.
    - During grading use water, as necessary, on disturbed areas in construction sites to control visible plumes.
    - o Vehicle Speed
      - Limit speeds to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.
      - Limit speeds to 10 miles per hour or less on unpaved areas within construction sites on unstabilized (and unpaved) roads.
      - Post visible speed limit signs at construction site entrances.
    - Inspect and wash construction equipment vehicle tires, as necessary, so they are free of dirt before entering paved roadways, if applicable.
    - Provide gravel ramps of at least 20 feet in length at tire washing/cleaning stations, and ensure construction vehicles exit construction sites through treated entrance roadways, unless an alternative route has been approved by appropriate lead agencies, if applicable.
    - Use sandbags or equivalent effective measures to prevent run-off to roadways in construction areas adjacent to paved roadways. Ensure consistency with the project's Storm Water Pollution Prevention Plan, if such a plan is required for the project
    - o Sweep the first 500 feet of paved roads exiting construction sites, other unpaved roads en route from the construction site, or construction staging areas whenever dirt or runoff from construction activity is visible on paved roads, or at least twice daily (less during periods of precipitation).
    - Stabilize disturbed soils (after active construction activities are completed) with a non-toxic soil stabilizer, soil weighting agent, or other approved soil stabilizing method.
    - Cover or treat soil storage piles with appropriate dust suppressant compounds and disturbed areas that remain inactive for longer than 10 days. Provide vehicles

- (used to transport solid bulk material on public roadways and that have potential to cause visible emissions) with covers. Alternatively, sufficiently wet and load materials onto the trucks in a manner to provide at least one foot of freeboard.
- O Use wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) where soils are disturbed in construction, access and maintenance routes, and materials stock pile areas. Keep related windbreaks in place until the soil is stabilized or permanently covered with vegetation.

## Mobile and Stationary Source Controls:

- o If practicable, lease new, clean equipment meeting the most stringent of applicable Federal<sup>10</sup> or State Standards<sup>11</sup>. In general, commit to the best available emissions control technology. Tier 4 engines should be used for project construction equipment to the maximum extent feasible<sup>12</sup>.
- Where Tier 4 engines are not available, use construction diesel engines with a rating of 50 hp or higher that meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines<sup>13</sup>, unless such engines are not available.
- Where Tier 3 engine is not available for off-road equipment larger than 100 hp, use a Tier 2 engine, or an engine equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides and diesel particulate matter to no more than Tier 2 levels.
- Consider using electric vehicles, natural gas, biodiesel, or other alternative fuels during construction and operation phases to reduce the project's criteria and greenhouse gas emissions.
- o Plan construction scheduling to minimize vehicle trips.
- Limit idling of heavy equipment to less than 5 minutes and verify through unscheduled inspections.
- Maintain and tune engines per manufacturer's specifications to perform at CARB and/or EPA certification levels, prevent tampering, and conduct unscheduled inspections to ensure these measures are followed.

#### · Administrative controls:

- Develop a construction traffic and parking management plan that maintains traffic flow and plan construction to minimize vehicle trips.
- O Identify any sensitive receptors in the project area, such as children, elderly, and infirmed, and specify the means by which you will minimize impacts to these populations (e.g. locate construction equipment and staging zones away from sensitive receptors and building air intakes).
- Include provisions for monitoring fugitive dust in the fugitive dust control plan and initiate increased mitigation measures to abate any visible dust plumes.

For California, see ARB emissions standards, see: http://www.arb.ca.gov/msprog/offroad/offroad.htm.

13 as specified in California Code of Regulations, Title 13, section 2423(b)(1)

<sup>&</sup>lt;sup>10</sup> EPA's website for nonroad mobile sources is http://www.epa.gov/nonroad/.

Diesel engines < 25 hp rated power started phasing in Tier 4 Model Years in 2008. Larger Tier 4 diesel engines will be phased in depending on the rated power (e.g., 25 hp - <75 hp; 2013; 75 hp - < 175 hp; 2012-2013; 175 hp - < 750 hp; 2011 – 2013; and  $\geq$  750 hp 2011- 2015).

## Noise Impacts

The DEIS should include an assessment of noise levels from the wind turbines. Decibel levels of the turbines should be evaluated as should the effects of noise levels on a variety of species, as well as effects on property values, residences, and recreational use.

## Visual Impacts

Careful attention should be given to how a wind turbine array is set against the landscape. Steps should be taken to minimize the visual impacts and make the wind turbines less obtrusive.

## Hazardous Materials/Hazardous Waste/Solid Waste

The DEIS should address potential direct, indirect and cumulative impacts of hazardous waste from construction and operation. The document should identify projected hazardous waste types and volumes, and expected storage, disposal, and management plans. It should address the applicability of state and federal hazardous waste requirements. Appropriate mitigation should be evaluated, including measures to minimize the generation of hazardous waste (i.e., hazardous waste minimization). Alternate industrial processes using less toxic materials should be evaluated as mitigation. This potentially reduces the volume or toxicity of hazardous materials requiring management and disposal as hazardous waste.

## Wind Turbine Production and Recycling

Wind turbine production can address the full product life cycle, from raw material sourcing through end of life collection and reuse or recycling. Wind turbine companies can minimize their environmental impacts during raw material extraction and minimize the amount of rare materials used in the product. Collection and recycling can be facilitated through buy-back programs or collection and recycling guarantees. Some companies provide recycling programs that pay all packaging, transportation, and recycling costs.

#### Recommendation:

EPA recommends that the proponent strive to address the full product life cycle by sourcing wind turbine components from a company that: 1) minimizes environmental impacts during raw material extraction; 2) manufactures wind turbines in a zero waste facility; and 3) provides future disassembly for material recovery for reuse and recycling.

#### Project Decommissioning, Site Restoration and Financial Assurance

On average, a lifespan of a wind park is 20-30 years. The life of the proposed wind project should be taken into consideration regarding decommissioning and reclamation.

## Recommendation:

The EPA recommends that the DEIS include a requirement for a decommissioning and site restoration plan to include cost estimates; the project owner to secure a performance bond surety bond, letter of credit, corporate guarantee, or other form of financial assurance adequate to cover the cost of decommissioning/restoration; description of the conditions when decommissioning

will commence; description of time allotted to complete the decommissioning; description of the structures, facilities, and foundations to be removed; and restoration of the site by recontouring the surface and revegetation to a condition reasonably similar to the original condition.

## Coordination with Tribal Governments

#### Executive Order 13175

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (November 6, 2000), was issued in order to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, and to strengthen the United States government-to-government relationships with Indian tribes.

#### Recommendation:

The DEIS should describe the process and outcome of government-to-government consultation between the BLM and each of the tribal governments within the project area, issues that were raised (if any), and how those issues were addressed in the selection of the proposed alternative.

#### National Historic Preservation Act and Executive Order 13007

Consultation for tribal cultural resources is required under Section 106 of the National Historic Preservation Act (NHPA). Historic properties under the National Historic Preservation Act (NHPA) are properties that are included in the National Register of Historic Places (NRHP) or that meet the criteria for the National Register. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, consult with the appropriate State Historic Preservation Officer/Tribal Historic Preservation Officer (SHPO/THPO). Under NEPA, any impacts to tribal, cultural, or other treaty resources must be discussed and mitigated. Section 106 of the NHPA requires that Federal agencies consider the effects of their actions on cultural resources, following regulation in 36 CFR 800.

Executive Order 13007, *Indian Sacred Sites* (May 24, 1996), requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian Religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important to note that a sacred site may not meet the National Register criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site.

#### Recommendation:

The DEIS should address the existence of Indian sacred sites in the project areas. It should address Executive Order 13007, distinguish it from Section 106 of the NHPA, and discuss how the BLM will avoid adversely affecting the physical integrity, accessibility, or use of sacred sites, if they exist. The DEIS should provide a summary of all coordination with Tribes and with the SHPO/THPO, including identification of NRHP eligible sites, and development of a Cultural Resource Management Plan.

## Environmental Justice and Impacted Communities

The recently signed interagency Memorandum of Understanding on Environmental Justice and Executive Order 12898 (August 4, 2011) and the Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994) directs federal agencies to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations, allowing those populations a meaningful opportunity to participate in the decision-making process. Guidance by CEQ clarifies the terms low-income and minority population (which includes American Indians) and describes the factors to consider when evaluating disproportionately high and adverse human health effects.

#### Recommendations:

The DEIS should include an evaluation of environmental justice populations within the geographic scope of the projects. If such populations exist, the DEIS should address the potential for disproportionate adverse impacts to minority and low-income populations, and the approaches used to foster public participation by these populations. Assessment of the project's impact on minority and low-income populations should reflect coordination with those affected populations.

The DEIS should describe outreach conducted to all other communities that could be affected by the project, since rural communities may be among the most vulnerable to health risks associated with the project.

## Coordination with Land Use Planning Activities

The DEIS should discuss how the proposed action would support or conflict with the objectives of federal, state, tribal or local land use plans, policies and controls in the project areas. The term "land use plans" includes all types of formally adopted documents for land use planning, conservation, zoning and related regulatory requirements. Proposed plans not yet developed should also be addressed it they have been formally proposed by the appropriate government body in a written form (CEQ's Forty Questions, #23b).

<sup>&</sup>lt;sup>14</sup> Environmental Justice Guidance under the National Environmental Policy Act, Appendix A (Guidance for Federal Agencies on Key Terms in Executive Order 12898), CEQ, December 10, 1997.

## UNITED STATES

75 HAWTHORNE STREET
SAN FRANCISCO, CALIFORNIA 94105-3901

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

#### AN EQUAL OPPORTUNITY EMPLOYER



Jeffery Childers, California Desert 22835 Calle San Ju Moreno Valley, CA



# United States Department of the Interior

FISH AND WILDLIFE SERVICE

11 AUG 22 PM 3Verbura Fish and Wildlife Office
2493 Portola Road, Suite B

CALIL
Wentura, California 93003

MORENO VALLEY, CA



IN REPLY REFER TO 81440-2011-TA-0478

August 16, 2011

Jacquelyn Kitchen
Planning and Community Development Department
County of Kern
2700 "M" Street, Suite 100
Bakersfield, California 93301-2323

Subject:

Notice of Preparation and Notice of Intent of Draft Environmental Impact Report and Environmental Impact Statement for Alta East Wind Energy Project by Alta Windpower Development, LLC. (PP11212) General Plan Amendment 2, Zone Map 168 and 168-27; General Plan Amendment 3, Zone Map 179; General Plan Amendment 1, Zone Map 180; Zone Change Case 10, Map 168; Zone Change Case 4, Map 168-27; Zone Change Case 3, Map 179; Zone Change Case 6, Map 180; Zone Change Case 47, Map 197; Conditional Use Permit No. 7, Map 168, Kern County, California

## Dear Ms. Kitchen:

We have reviewed the referenced notice of preparation/notice of intent to develop a draft environmental impact report/environmental impact statement and offer the following comments on the proposed development of the Alta EastWind Energy Project. The proposed action would include general plans amendments and changes in zone classification and development as described in your letter submitted to the U. S. Fish and Wildlife Service (Service) on July 15, 2011, regarding the subject project. We are providing these comments under the authorities of the Federal Endangered Species Act of 1973, as amended, the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act (Eagle Act), and other authorities of the Department of the Interior.

We agree with the County of Kern's (County) and Bureau of Land Management's (Bureau) assessment of the probable environmental effects of the proposed action with regard to biological resources. Specifically, the proposed project may have substantial adverse effects on sensitive and special status species, riparian and other sensitive natural communities, and migratory corridors for wildlife. The notice indicates that field surveys have identified several special-status species, including federally listed species, within and adjacent to the project area. We encourage the County and Bureau to work with the Service to review the survey results for their adequacy and to work with the service to develop avoidance, minimization, and mitigation measures. For any surveys that have yet to be completed, we recommend that the County and Bureau require the applicant to use protocols that have been developed or approved by the

Service and California Department of Fish and Game; please contact us or staff from the California Department of Fish and Game if you or the applicant have any questions regarding the protocols.

The Service is concerned that the subject project poses a threat to the endangered California condor (Gymnogyps californianus). In the last few years, California condors have expanded their use of the habitat available to them, and have continued to re-colonize historical portions of the species' range, moving east and north into the Tehachapi and Sierra Nevada mountain ranges, and within the vicinity of numerous wind facilities that are under construction or have been proposed. The Service is currently working with a group of stakeholders and the U.S. Geological Survey to try to assess the areas that California condors are likely to use in the future, based on land based habitat and wind patterns. Until we can ascertain how California condors will use the wind resources, we remain concerned that wind energy facilities in this region pose a substantial threat to the species. Given the behavioral ecology of California condors (e.g., the importance of experienced individuals in teaching recently released birds how to survive and their habitat of gathering in large numbers at a single carcass), we consider avoidance of mortality of California condors to be the only acceptable conservation strategy at this point in time. In particular, because of their feeding strategy, we are concerned that many individuals could be killed by wind turbines during a single feeding event. The draft environmental impact report/environmental impact statement should fully evaluate the potential for such incidents to occur and assess whether measures can be implemented to avoid them. If you are interested, we can provide you with recent information on the locations of California condors in this area.

Section 9 of the Endangered Species Act prohibits the "take" of listed species and could result in prosecution unless that take is authorized by the Service. Take is defined by the Endangered Species Act of 1973 as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Harm" is further defined as significant habitat modification or degradation that actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering (50 Code of Federal Regulations 17.3). "Harass" is defined as an intentional or negligent act or omission that creates the likelihood of injury to listed species by annoying it to such an extent as to significantly impair normal behavioral patterns which include breeding, feeding or sheltering (50 Code of Federal Regulations 17.3). Take may be authorized by the Service through the issuance of a biological opinion for federal projects pursuant to section 7(a)(2) of the Endangered Species Act, or the issuance of an incidental take permit pursuant to section 10(a)(1)(B0 of the Act. Despite the fact that take can be authorized for listed species, given that relatively few individuals remain in the wild and the potential for the proposed activity to kill multiple California condors, either in multiple events or during a single feeding event, authorizing lethal take of California condors could be difficult.

The proposed project has the potential to result in the "take" of golden eagles (Aquila chrysaetos. The Bald and Golden Eagle Act (50 Code of Federal Regulation 22.26, 22.27) prohibits a variety of actions with respect to eagles, including their "take." Take under the Eagle Act is defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, or molest or disturb."

Anyone who takes an eagle is in violation of the Eagle Act unless the take has been authorized by the Secretary of the Interior via a permit obtained prior to the action. Under the Eagle Act, "disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, either injury to an eagle or a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior. "Substantial interference" was not defined in regulation but refers to interference at or above the level that causes eagles to abandon their nest or that causes injury or loss of productivity. "Injury" could be the direct result of the interference, such as a nestling being knocked from the nest by a startled adult, or it can be indirect, such as a nestling that is fed inadequately because the adults are agitated by human activities in the vicinity of the nest. Loss of productivity refers to a situation where reproductive output is reduced. Some examples of disturbance causing a loss of productivity include adults abandoning a nesting attempt because of human activity in the vicinity, nestlings failing to survive because the adults are deterred from using their primary foraging area and cannot adequately feed them, and pairs of previously successful breeding eagles being underweight and making no nesting attempt the next breeding season after their wintering concentration area is disturbed. The Service addressed the issue of disturbance in detail in its final regulations defining the term (see 72 Federal Register 31132, June 5, 2007).

The Service issued regulations in September of 2009 (Federal Register 74: 46835-46879) that allow permits to take eagles under the Eagle Act where take is associated with, but not the purpose of the activity, and cannot practicably be avoided. Available information indicates that golden eagles populations are in decline. Therefore, the final Environmental Assessment and Finding of No Significant Impact set the current take threshold for golden eagles at zero; thus, take can only be authorized where it is "compatible with the preservation of the eagle." To achieve no-net loss for the species and to maintain stable or increasing breeding populations, applications for take permits will need to include measures to avoid and minimize the potential for take to the maximum degree practicable.

Individual permits can be authorized for limited instances of disturbance. To address landscapescale impacts, injuries, or mortalities, programmatic permits can be developed that may allow for take of eagles on an on-going operational basis. For these types of permits, the project proponent should implement comprehensive measures called "advanced conservation practices" that would be developed in cooperation with the Service. Advanced conservation practices are scientifically supportable measures that are approved by the Service and represent the best available techniques to reduce disturbance to and ongoing mortalities of eagles to a level where the remaining take is unavoidable, and the remaining impacts of the project have been offset. Currently, the Service is encouraging the development of eagle management plans to identify the specific measures a project proponent would implement to minimize a project's potential adverse effects to eagles. The Service's established protocols should be used for breeding and nonbreeding season surveys and monitoring, to assess potential impacts to resident, migrating, floater, and wintering golden eagles, and to provide rigorous data to address the conditions of existing population. Data collected pre- and post-construction should be used to determine ongoing risk and the potential for adaptive management strategies to continue to reduce conflict with eagles.

For these reasons, we recommend that the County and Bureau require the project applicants to conduct surveys for golden eagles according to our recommended guidelines found at this link: <a href="http://www.fws.gov/southwest/es/oklahoma/Documents/Wind%20Power/Documents/USFWS\_Interim\_GOEA\_Monitoring\_Protocol\_10March2010.pdf">http://www.fws.gov/southwest/es/oklahoma/Documents/Wind%20Power/Documents/USFWS\_Interim\_GOEA\_Monitoring\_Protocol\_10March2010.pdf</a>. If the surveys demonstrate that the proposed project would likely result in the take of golden eagles, we recommend that the County and Bureau require the project applicants develop advanced conservation practices to achieve the standard of no-net loss for the species.

We also recommend that the draft environmental impact report/environmental impact statement contain a comprehensive analysis of the cumulative effects of this and other renewable energy projects on golden eagles in Kern County and the California desert. We encourage the County and the Bureau to coordinate with the Service, and other local jurisdictions on a desert-wide planning effort to ensure the maintenance of a viable population of golden eagles in the California desert.

The Migratory Bird Treaty Act prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. The Migratory Bird Treaty Act has no provision for allowing take of migratory birds except under specific circumstances, such as threat to human health. We recognize that some birds may be killed at structures such as communication towers and wind energy facilities even if all reasonable measure to avoid it are implemented. The Service carries out its mission to protect migratory birds not only through investigations and enforcement, but also through fostering relationships with individuals and industries that proactively seek to eliminate their impacts on migratory birds. Although the Migratory Bird Treaty Act does not allow us to absolve individuals or companies from liability, if they follow recommended guidelines, the Service and Department of Justice have used enforcement and prosecutorial discretion in the past regarding individuals or companies who have made good faith efforts to avoid the take of migratory birds.

Wind energy developments affect wildlife in several ways. Raptors, passerines, waterbirds, and bats have been killed as a result of collision with rotating turbine blades and interactions with other infrastructure associated with wind energy facilities (Arnett et al. 2007, Kunz et al. 2007, Kuvlesky et al. 2007, Ontario Ministry of Natural Resources 2006). Barotrauma, an apparent effect of sudden air pressure changes from wind wake turbulence, also appears to cause direct mortality in some songbirds and is being documented in bats (Kunz et al. 2007, Manville 2009). In addition, wind energy projects can cause displacement and disturbance of wildlife, fragment habitat, negatively affect birds and bats by preventing breeding, decreasing population vigor and viability, and altering behavior; these potential effects should be considered when evaluating project sites (Stewart et al. 2007). Given the myriad potential impacts that the proposed projects may have on migratory birds and bats, we recommend that the County and Bureau include in the draft environmental impact report/environmental impact statement an avian and bat protection plan that identifies a full spectrum of adaptive management measures. We have enclosed information of the development of avian and bat protection plans. The plan should include

sufficient monitoring to detect mortality events that could result during sporadic migration pulses.

If you have any questions regarding this letter, please contact Ashleigh Blackford of the Ventura Fish and Wildlife Office at (805) 644-1766, extension 234.

Sincerely,

Carl Benz

Assistant Field Supervisor

# Enclosures

√Cc
Jeff Childers
Planning and Environmental Coordinator
California Desert District Office
Bureau of Land Management
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

## Literature Cited

- Arnett, E.B., D.B. Inkley, D.H. Johnson, R.P. Larkin, S. Manes, A.M. Manville, R. Mason, M. Morrison, M.D. Strickland, and R. Thresher. 2007. Impacts of wind energy facilities on wildlife and wildlife habitat. The Wildlife Society Technical Report 07-2. Bethesda, Maryland.
- Kunz, T.H., E.B. Arnett, B.M. Cooper, W.P. Erickson, R.P. Larkin, T. Mabee, M.L. Morrison, M.D. Strickland, and J.M. Szewczak. 2007. Assessing impacts of wind-energy development on nocturnally active birds and bats: a guidance document. Journal Wildlife Management 71:2249-2486.
- Kuvlesky, W.P., Jr., L.A. Brennan, M.L. Morrison, K.K. Boydston, B.M. Ballard, and F.C. Bryant. 2007. Wind energy development and wildlife conservation: challenges and opportunities. Journal Wildlife Management 71:2487-2498.
- Manville, A.M., II. 2009. Towers, turbines, power lines, and buildings steps being taken by the U.S. Fish and Wildlife Service to avoid or minimize take of migratory birds at these structures. Pgs. 262-272. In T.D. Rich, C. Arizmondi, D. Demarest, and C. Thompson [eds.], Tundra to Tropics: Connecting Habitats and People. Proceedings 4th International Partners in Flight Conference, 13-16 February 2008, McAllen, Texas. Partners in Flight.
- Ontario Ministry of Natural Resources. 2006. Wind power and bats: Bat ecology background information and literature review of impacts. December. Fish and Wildlife Branch. Wildlife Section. Lands and Waters Branch. Renewable Energy Section. Peterborough, Ontario.
- Stewart, G.B., A.S. Pullin, and C.F. Coles. 2007. Poor evidence-base for assessment of windfarm impacts on birds. Environmental Conservation 34:1-11.

# US Fish and Wildlife Service Pacific Southwest Region

# INTERIM GUIDELINES FOR THE DEVELOPMENT OF A PROJECT SPECIFIC AVIAN AND BAT PROTECTION PLAN FOR WIND ENERGY FACILITIES

# I. Introduction and Purpose

Increased energy demands and the nationwide goal to increase energy production from renewable sources have intensified the development of energy facilities, including wind turbines. The U.S. Fish and Wildlife Service (Service) supports renewable energy development. However, the Service strongly encourages energy development that is wildlife- and habitat-friendly. Of concern is that the cumulative effects of renewable energy projects may initiate or contribute to the decline of some bird and bat populations as well as other affected species. In order to ensure that renewable energy projects avoid and minimize impacts to bird and bat populations, the Service's Pacific Southwest Region developed these *Interim Guidelines for the Development of a Project Specific Avian and Bat Protection Plan for Wind Energy Facilities* as a means to provide energy project developers a tool for assessing the risk of potential impacts, designing, and then operating a bird- and bat-friendly wind facility.

Migratory birds are a Federal trust resource managed and protected by the Service. The Service estimates that between 58,000 and 440,000 birds are killed each year by wind turbines in the U.S., with that number growing based on at least 23,000 commercially operating turbines today (Manville 2005, 2009). Impacts from wind energy developments result from both direct and indirect causes. Raptor, passerine, waterbird, and bat fatalities have been documented as a result of collision with rotating turbine blades and interactions with other infrastructure associated with wind energy facilities (Arnett et al. 2007, Kunz et al. 2007, Kuvlesky et al. 2007, Ontario Ministry of Natural Resources 2006). Barotrauma, an apparent effect of sudden air pressure changes from wind wake turbulence, also appears to cause direct mortality in some songbirds and is being documented in bats (Kunz et al. 2007, Manville 2009). In addition, indirect impacts from energy projects such as displacement, disturbance, and habitat fragmentation can have negative effects on birds and bats by preventing breeding, decreasing population vigor and/or viability, and altering behaviors and should be considered when evaluating project sites (Stewart et al. 2007).

## Legal Drivers

The Endangered Species Act (16 U.S.C. § 1531 et seq.; ESA) prohibits the harassment, harm, pursuit, hunting, shooting, wounding, killing, trapping, capture, or collection of a listed species. ESA provides specific mechanisms to authorize "incidental" take that occurs as a result of an otherwise legal activity and does not jeopardize listed species or adversely modify habitat designated as critical. An ABPP does not authorize take of federally listed species.

The Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.; MBTA) prohibits the taking, killing, possession, transportation and importation of migratory birds, their eggs, parts, and nests, except when authorized by the Department of Interior. Because MBTA does not provide a specific mechanism to permit "incidental" take, it is important for proponents to work proactively with

the Service to avoid and minimize take. While MBTA has no provision for allowing an "incidental" take, it must be recognized that some birds may be killed at renewable energy developments even if all reasonable measures to avoid it are implemented. The Service's Office of Law Enforcement carries out its mission to protect migratory birds not only through investigations and enforcement, but also through fostering relationships with individuals and industries that proactively seek to eliminate their impacts on migratory birds. While it is not possible under MBTA to absolve individuals, companies, or agencies from liability if they follow these recommended guidelines, the Department of Justice has used prosecutorial discretion in the past regarding individuals, companies, or agencies who have made good faith efforts to avoid the take of migratory birds.

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d; BGEPA) further protects eagles from "take", where take is defined as to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, disturb individuals, their nests and eggs. "Disturb" was defined in 2007 (72 FR 31132) as "to agitate or bother a bald or golden eagle to a degree that causes...injury to an eagle, reduced productivity, or nest abandonment..." In 2009, two new permit rules were created for eagles. New 50 CFR 22.26 can authorize limited take of bald (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) when the take is associated with, but not the purpose of an otherwise lawful activity, and cannot practicably be avoided. New 50 CFR 22.27 can provide for the intentional take of eagle nests where necessary to alleviate a safety hazard to people or eagles, to ensure public health and safety, where nest prevents use of a human-engineered structure, and where the activity or mitigation for the activity will provide a net benefit to eagles. Only inactive nests are allowed to be taken except in cases of safety emergencies.

These new rules and regulations pertaining to take do not alter or increase in any way existing prohibitions against take in the statute, but do provide a mechanism where non-purposeful take of eagles can be legally authorized. However, BGEPA provides the Secretary of Interior with the authority to issue eagle take permits only if he is able to determine that the take is compatible with the preservation of the eagle. This must be "...consistent with the goal of increasing or stable breeding populations." For more information regarding the new eagle rules see the eagle rule and guidance listed in Appendix 1 of this document. The development of a protection plan does not guarantee qualification for a permit under BGEPA.

#### What is an Avian and Bat Protection Plan?

An Avian and Bat Protection Plan (ABPP) is a project-specific document that delineates a program designed to reduce the operational risks that result from bird and bat interactions with a specific wind energy facility. Although each project's ABPP will be different, the overall goal of any ABPP should be to reduce avian and bat mortality with the ultimate goal of eliminating take. The development and implementation of an ABPP is voluntary and is not intended nor shall it be construed to limit or preclude the Service from exercising its authority under any laws, statute, or regulation, and to take enforcement action against any individual, company, industry, or agency or to release any individual, company, industry, or agency of its obligation to comply with any applicable Federal, State, or local laws, statutes, or regulations. Ultimately, the ABPP can and should result in an agreement between the project proponent and the Service as a "good faith" effort to conserve migratory birds and bats while still allowing for the development of

wind energy projects and production of renewable electricity in the most environmentally friendly ways possible and practicable.

In an effort to reduce the impacts of wind energy projects to migratory birds and bats, the Service recommends that wind energy project proponents develop an ABPP that outlines the project development process and includes conservation measures that will be implemented to avoid and minimize impacts to birds and bats at each project they propose to develop. ABPPs could be similar or essentially the same for adjacent projects or may simply not be needed (see criteria below). The ABPP will aid project developers with 1) establishing project development in an adaptive management framework, 2) proper siting and project design strategies, 3) design and implementation of pre-construction surveys, 4) implementing appropriate conservation measures for each development phase, 5) design and implementation of appropriate post-construction monitoring strategies, 6) use of possible post-construction studies to better understand the dynamics of mortality reduction (e.g., changes in blade cut-in speed, assessments of blade "feathering" success, and studies on the effects of visual and acoustic deterrents) including efforts tied into Before-After/Control-Impact (BACI) analysis, and 7) conducting a thorough risk assessment and validation leading to adjustments in management and mitigation actions.

The template/recommendations set forth in this guidance were based upon the Avian Powerline Interaction Committee (APLIC) APP template (2005) developed for electric utilities and has been modified accordingly to address the unique concerns with wind energy facilities. These recommendations are consistent with the 2003 Service Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines (USFWS 2003) and the March 4, 2010, Wind Turbine Guidelines Advisory Committee Recommendations to the Secretary of Interior. These ABPP guidelines follow the principles of the Advisory Committee guidelines, which strive to:

- 1. Provide a consistent methodology for conducting pre-construction risk assessments and post-construction impact assessments to guide siting decisions by developers and agencies.
- 2. Encourage communication and coordination between the developer and relevant state and federal agencies during all phases of wind energy project development.
- 3. Provide mechanisms to encourage the adoption and use of the Guidelines by all federal agencies, as well as the wind energy industry, while recognizing the primary role of the lead agency in coordinating specific project assessments.
- 4. Complement state and tribal efforts to address wind/wildlife interactions and provide a voluntary means for these entities to coordinate and standardize review of wind projects with the USFWS.
- 5. Provide a clear and consistent approach that increases predictability and reduces the risk of liability exposure under federal wildlife laws.
- 6. Provide sufficient flexibility to accommodate the diverse geographic and habitat features of different wind development sites.
- 7. Present mechanisms for determining compensatory mitigation, when appropriate, in the event of unforeseen impacts to wildlife during construction or operation of a wind energy project.
- 8. Define scientifically rigorous and cost-effective study designs that improve the ability to predict direct and indirect wildlife impacts locally and regionally.

9. Include a formal mechanism for revision in order to incorporate experience, technological improvements, and scientific advances that reduce uncertainty in the interactions between wind energy and wildlife.

# II. Criteria for Developing an ABPP

Due to differences in wind energy projects, locations selected for development, and varying distribution of wildlife resources and their habitats, some wind energy projects may not need to develop an ABPP. The following criteria should be used to determine if a project should pursue the development of an ABPP. If a project does not fit within the decision key criteria below to develop an ABPP, coordination with the Service is encouraged prior to actual site selection and project construction to ensure that appropriate conservation measures that avoid and minimize bird and bat impacts are incorporated into the project design. Below is a decision key to determine whether an ABPP should be developed.

- A. Are there bird or bats that are listed as federally threatened or endangered, state threatened or endangered, state species of special concern, state fully protected, or delineated on the federal Birds of Conservation Concern list (USFWS 2008) that use the project footprint for nesting, wintering, foraging, staging, roosting, breeding, or migrating?
  - 1. If yes **DEVELOP ABPP**
  - 2. If no Go to B
- B. Is there one or more eagle territory within the project footprint or 16 km (10 miles) of the nearest project boundary?
  - 1. If yes **DEVELOP ABPP**
  - 2. If no Go to C
- C. Is the project footprint (including transmission corridors) located within/or adjacent to a designated Important Bird Area (see <a href="http://www.audubon.org/bird/IBA/">http://www.audubon.org/bird/IBA/</a>) or within a major bird and/or bat migratory corridor, pathway, staging area, breeding, roosting, wintering, or stopover site (e.g., Western Hemisphere Shorebird Reserve Network [WHSRN], or Ramsar Convention site)?
  - 1. If yes or unknown **DEVELOP ABPP**
  - 2. If no Go To D
- D. Does the project consist of > 10 turbines each equal to or greater than 1.5 Megawatt (MW)?
  - 1. If yes **DEVELOP ABPP**
  - 2. If no Go to E

#### III. Recommended Elements of an ABPP

While the structure of an individual ABPP will be based upon the specifics of the project, it is recommended that every ABPP contain the following elements and address both birds and bats.

A. Introduction

- 1. A description of the purpose and goal of the plan
- 2. Legal drivers MBTA, BGEPA, ESA, Section 404 of the Clean Water Act, National Environmental Protection Act (if there is a Federal nexus), state regulations, other regulations as appropriate
- B. Corporate Policy An ABPP typically includes a statement of company policy confirming the company's commitment to work cooperatively towards the protection of migratory birds and bats.
- C. Adaptive Management and Habitat Compensation
  - 1. Adaptive Management Process outline the adaptive management process, including key decision making steps to ensure each phase (e.g., siting, design, construction, operation, and post-operation) of project development is evaluated
    - a. Establish goals for the project
    - b. Establish biologically meaningful triggers for management actions such as:
      - i. Additional Conservation Measures (CMs) operational changes if appropriate (e.g., seasonal blade "feathering" protocol, changes in blade cut-in speed, turbine set-backs from ridges, elimination of "killer" turbine strings, and replacement of turbines in dips and end-of-row turbines with pylons).
      - ii. Additional monitoring or research studies if appropriate
      - iii. Additional compensation if appropriate (e.g., habitat compensation, other mitigation measures)
  - 2. Habitat Compensation The Service recommends habitat compensation for the loss of high quality bird habitat
    - a. Habitat Equivalency Analysis HEA is a pre-construction analysis tool to guide upfront habitat compensation (see below for more information)

## D. Site Suitability Assessment

- 1. Pre-site Assessment
  - a. Determine whether the site is designated as Critical Habitat under the Endangered Species Act, designated as an Important Bird Area, WHSRN or RAMSAR site, an area of critical environmental concern (ACEC), or other special designation as important for wildlife.
  - b. Using an initial coarse site assessment (e.g., Potential Impact Index [PII], Rapid Assessment Method [RAM]) identify important habitats, sensitive species (e.g., Species of Conservation Concern, Threatened or Endangered Species, or eagles), and other environmental issues within the proposed footprint.
  - c. Make a determination as to whether the proposed site can be developed for wind energy while concurrently avoiding or minimizing impacts to wildlife. An alternative site analysis may be required if significant adverse impacts cannot be minimized.
- 2. Pre-construction Studies and Risk Assessment
  - a. Bird Use Studies Determine the temporal and spatial distribution of avian populations including special status species within the proposed

- footprint, during the breeding, nesting, foraging, roosting, feeding, wintering, and migration seasons.
- b. Bat Use Studies Determine the presence and activity levels of bats at a temporal and spatial scale during the breeding, winter, and migration seasons within the proposed footprint.
- c. Threats Identify the current threats to wildlife within entire project footprint.
- d. Risk Assessment What are potential short and long-term impacts of project development on bird and bat populations, including the cumulative impacts from all threats (including compensatory and additive) and lethal "take"?
- 3. Reporting All site surveys, rapid assessment methodologies, reconnaissance surveys, and risk assessments should be shared with appropriate agencies prior to final site selection and initial construction. To the extent allowable under the Freedom of Information Act (FOIA), this information would remain confidential between the Service and the proponent and be protected from the release to the public.
- E. Project Design and Impact-Reducing Conservation Measures
  - 1. A detailed description of the facility layout, including macro- and micro-siting CMs implemented (e.g., avoid fragmenting large contiguous blocks of high quality bird/bat habitat, creation of avoidance buffers, turbine set-backs from ridges; see below for additional siting CMs).
  - 2. Construction Phase CMs to be implemented (e.g., avoid breeding season for vegetation removal and construction, minimize area disturbed to maximum practicable)
  - 3. Operation Phase CMs to be implemented (e.g., minimize lighting, follow all APLIC guidelines; see below for additional operational CMs)
- F. Post-Construction Monitoring and Risk Assessment Validation
  - 1. A detailed description of the post-construction monitoring plan including the proposed duration and intensity of monitoring including a justification.
  - 2. The monitoring plan should assess changes in baseline data.
    - a. Changes in temporal and spatial distribution of wildlife populations
    - b. Changes in migratory or resident species behavior (e.g., avoidance of the site, attraction to the site, abandonment of the site, attraction of nest predators, and noted reduction in population vigor).
  - 3. Mortality Studies must include detectability and scavenger studies based on the use of accepted scavenger and search efficiency studies (e.g., Erickson et al. 2004, Kunz et al. 2007).
  - 4. Nest Management identify actions that are proposed to be taken by the proponent and/or its consultant when nests are observed on facilities (e.g., power poles, infrastructure, or outbuildings).
  - 5. Risk Assessment Validation comparison of pre- and post-construction data to determine "actual" impacts to wildlife due to facility operation, ideally validating or negating the pre-construction risk assessment.

#### 6. Reporting

- a. Facility Mortality Reporting System develop an internal reporting system for the facility to report detected bird and bat mortalities. This system will include provisions to report bird/bat fatalities to the Service office of Law Enforcement's confidential, voluntary mortality reporting website.
- b. Agency Reports annual monitoring reports (including documented mortalities) will be submitted to the appropriate federal, state, and/or county agencies. Annual reporting will be a condition of any migratory bird or eagle permit issued by the Regional Migratory Bird Permits Office.

# G. Implementation

- 1. Permit Compliance An ABPP should identify which permits are required related to wildlife issues.
- 2. Employee Training Training is an important element of an ABPP. All appropriate facility personnel should be properly trained in avian and bat issues including basic avian and bat biology, ecology, behavior, presence, site use, monitoring protocols, and key issues that may result in significant impacts (e.g., presence of Federally listed species, critical habitat, adjacent hibernacula, and maternity colonies). This training should encompass the reasons, need, and method by which employees should report a bird or bat mortality, follow nest management protocols, dispose of carcasses, comply with applicable regulations, including the consequences of non-compliance, and the appropriate agencies that should be contacted after incidents.
- 3. Quality Control An ABPP should provide a mechanism to review existing practices, ensuring quality control and a project audit.
- 4. Key Resources key regulations, laws, contact information, forms, protocols, etc.
- 5. Public Awareness –outreach and education materials for stakeholders, etc.

# IV. Guidance on Specific Elements of ABPP

The following section is meant to provide project proponents useful information for planning each development phase of the facility. For each phase outlined below, conservation measures and guidance are recommended for inclusion in the development of any wind energy project.

#### Coordination

The most essential element to developing a successful project is the coordination between the project proponent and the appropriate agencies (e.g., federal, state, county agencies). Early coordination ensures that all parties and agencies understand the scope of the project and can highlight details that require special attention. Early coordination with agency personnel can ensure appropriate survey design is used, special status species are addressed, specific conservation measures are recommended, and inform the project proponent about any permit requirements and how to obtain those permits. Through early coordination, the project

proponent should understand agency expectations and have guidance on how to meet those expectations.

# Adaptive Management and Habitat Compensation

The Service recommends that proponents take an Adaptive Management (AM) approach to project development and operation. Adaptive Management promotes flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions become better understood (Williams et al. 2009). The AM process is a decision making process that has six key principles: Problem Assessment, Design, Implementation, Monitoring, Evaluation, and Adjustment. The AM process should establish clear, biologically appropriate goals and triggers tied to mitigation measures. Based on the validation of risk assessment through post-construction monitoring a series of adaptive management actions should be identified as possible solutions to identified sources of wildlife impacts. The AM process should develop triggers based on available data and perceived risk that signal the level of adaptive action that is required. Through the AM process, management decisions can be made in response to post-construction assessments. Adapative Management decisions could include (but are not limited to) changes in facility operation, use of additional conservation measures, further impact research or monitoring, and/or additional resource compensation. For a complete discussion of AM, please see Williams et al. (2009).

In order to compensate for the loss of high quality wildlife habitat, the Service strongly encourages project proponents to conduct a Habitat Equivalency Analysis (HEA) and determine compensation for both temporary and permanently lost habitat at the start of the project. HEA is a method of quantifying interim and permanent habitat injuries, measured as a loss of habitat services from pre-disturbance conditions, and scaling compensatory habitat requirements to those injuries (Dunford et al. 2004, National Oceanic and Atmospheric Administration 2006, 2009). Habitat services are generally defined by a metric that represents the functionality of that habitat (i.e., the ability of that habitat to provide "services" such as nest sites, prey populations, cover from predators, protected loafing areas, protected roosting areas, and reliable feeding sites). Interim habitat injuries are those habitat services that are absent during disturbance and during vegetation restoration that would have been available if that disturbance had not occurred. Permanent habitat injuries are habitat injuries remaining after vegetation recovery is complete (e.g., permanent habitat loss). The objective of an HEA is to replace lost services with like services, providing a replacement ratio for interim and permanent injury (see literature in Appendix 1 for more information on HEA).

#### Pre-siting Data Collection

Due to local differences in wildlife concentrations and movement patterns, habitats, area topography, facility design, and weather; each proposed development site is unique and requires detailed and individual evaluation (USFWS 2003). In addition, renewable energy projects are rapidly expanding into habitats and regions that have not been well studied and where animal population data are scarce. Thus, in an effort to place projects in locations that will yield the least risk of population impacts, a rigorous siting evaluation process should be completed.

Pre-siting analyses should consist of 1) a coarse site assessment (e.g., PII, RAM), 2) a HEA, 3) site specific wildlife use surveys, and 4) a wildlife-facility interaction risk assessment. Data collection methods will vary between projects due to differences mentioned previously, however the Service recommends the following considerations when conducting pre-siting assessments.

- A. Coarse Site Assessment Each pre-siting assessment should start with a coarse site assessment of the potential environmental issues that might preclude the site from development based on its perceived or validated level of risk. At a minimum, every wind project should conduct either a PII (USFWS 2003 Appendix 1) or use a more detailed and consistent RAM that will include a checklist for temporal and spatial air space components lacking in the PII (the RAM is still in development). Factors that should be considered during any coarse assessment include:
  - 1. Is the site designated as Critical Habitat for any federally listed species?
  - 2. Is the site designated as an Important Bird Area (see <a href="http://www.audubon.org/bird/IBA/">http://www.audubon.org/bird/IBA/</a>), or a WHSRN or RAMSAR site?
  - 3. Does the site provide suitable habitat for any federal or state listed species, or sensitive species (e.g., ACEC)?
  - 4. What is the type and quality of bird/bat habitat within and surrounding the footprint?
- B. Habitat Equivalency Analysis The Service encourages the wind industry to look for opportunities to promote bird, bat, and other wildlife conservation when planning renewable energy facilities. These opportunities may come in the form of voluntary habitat acquisition or conservation easements. In order to quantify the appropriate compensation acreage, the use of an HEA can be used to identify high quality habitat and calculate compensation for the development of high quality habitats for both permanent and temporary losses. See HEA resources in Appendix 1 of this document.

# C. Site Specific Wildlife Surveys

- 1. Development of appropriate survey question It is important to develop the appropriate survey questions as they dictate the sampling design and protocols to be used. An inappropriate study design and/or insufficient duration of data collection may result in unreliable data inferences with resultant biases and skewed results (Kunz et al. 2007). Pre-siting survey data will become the baseline for project impacts to bird and bat populations. Thus, most survey designs should be established as BACI studies, when possible. Well designed BACI studies that test the response of birds and bats to certain operational conditions are needed to fully evaluate options for mitigating fatalities to birds and bats at wind-energy projects (Kunz et al. 2007). Examples of possible survey questions include (but are not limited to):
  - a. Which species of birds and bats use the project area and how do their numbers vary temporally (i.e., daily, monthly, annually)?
  - b. How much time do birds/bats spend in the risk zone (rotor swept area) and does this behavior vary by season?
  - c. What is the estimated range of bird/bat mortalities from the project?

- d. Are there nesting raptors within the project footprint (all species), within 5 km (3 miles) of footprint (all species), within 16 km (10 miles) of footprint (eagles)?
- e. Is there a preponderance of inclement weather events that coincide with avian and/or bat presence that would put these species at especially high risk?
- 2. Selection of appropriate survey methodology Based on the project and questions being asked, there are many suitable methods to survey birds and bats and establish baseline data. Generally, it is recommended to employ multiple survey techniques to ensure adequate data collection. A good summary of survey methods can be found in Kunz et al (2007) for night-migrating birds and bats and Ontario Ministry of Natural Resources (2006) for bats. Efforts are currently underway to update the Anderson et al. 1999 methods for monitoring diurnally active birds. In addition, follow Service survey and monitoring guidelines (e.g., the Interim National Golden Eagle Inventory and Monitoring Guidelines; Pagel et al. 2010). Examples of survey methods that might be appropriate for wind projects include acoustic, radar, infrared, radio telemetry, mist netting, harp trapping, and a variety of observational surveys. Specific survey methods should include:
  - a. Diurnal bird use counts
  - b. Nocturnal bird use counts
  - c. Raptor nest searches (see Pagel et al. 2010 for golden eagle protocols)
  - d. Small bird counts (CEC 2007, EC/CWS 2006a and 2006b)
  - e. Migration counts
  - f. Acoustic bat monitoring
  - g. Bat roost exit counts if applicable
- 3. Duration and timing of surveys To collect data under variable climatic conditions and accumulate sufficient samples for data analysis, pre-construction surveys should be conducted to assess the potential risk of the proposed project to wildlife. Multi-year surveys, up to three years pre-construction, may be warranted. This can vary depending on the project specifics, known or perceived level of risk, the variability in use of habitat by avian species, environmental stochasticity, and species present. Surveys should be designed to ensure adequate data are collected on breeding, staging, migration, and winter bird/bat use of the project site, taking into account peak use of the site temporally and spatially. Bird surveys should include diurnal and nocturnal use studies for the project footprint. Bat surveys should also include year-round acoustic monitoring to detect presence and activity (e.g., mean number of passes/detector/night), as little information is typically known about the ecology of resident, wintering, and migrating bats. Coordinate with the wildlife agencies when selecting locations for bird and bat data collection.
- 4. <u>Use of additional data</u> Other sources of data may be available for specific project sites. When available and appropriate, these data should also be included in the site evaluation. Other good sources of bird data include (but are not limited to) Audubon Christmas Bird Count data, USGS Breeding Bird Survey data, Cornell Lab of Ornithology eBird data, California Natural Diversity Database, and Audubon Important Bird Area data. These data have utility limitations (i.e., what

- the data can be used for) and these limitations should be considered prior to inclusion in the assessments.
- 5. <u>Special status species</u> When evaluating a project site, special status species should be identified. Special status species include all federal and state species listed as endangered or threatened, state species of concern and fully protected species, and those listed on the Fish and Wildlife Service's Birds of Conservation Concern 2008 (http://library.fws.gov/Bird\_Publications/BCC2008.pdf)
  - a. Eagles The ABPP should address whether bald or golden eagles use the project site for foraging, roosting, nesting, wintering, migration, or as a migration stop-over site. The project assessment should address whether there are nesting bald or golden eagles within 16 km (10 miles) of the project site and include whether the project development impacts eagle foraging habitat, roost sites, wintering habitat, migratory stop-over sites, migratory corridors, defended eagle territories, or displaces eagles during either the breeding and/or the winter seasons.
- D. Risk Assessment The risk assessment should identify potential short and long-term impacts of the project development on bird and bat populations, including lethal "take" (as defined by all applicable regulations).
  - 1. <u>Site specific threats</u> Based on the results of the site specific wildlife surveys, the site specific risk assessment should address what the potential for take is based on:
    - a. Turbine collision and other turbine interactions (e.g., barotrauma, crippling loss or injury from wind wake turbulence and blade-tip vortices)
    - b. Transmission line, power tower, met tower, or guy line collision
    - c. Electrocution potential
    - d. Displacement issues
    - e. Nest and roost site disturbances
    - f. Habitat loss
    - g. Habitat fragmentation
    - h. Additional human presence disturbances
  - 2. <u>Cumulative Impacts</u> Effects that are likely to result from the project in combination with other projects or activities that have or will be carried out should be analyzed. We recommend that the cumulative effects assessment, where practicable and reasonable, should include the impacts from all threats and lethal "take".
    - a. Evaluate the cumulative effects of all new or existing renewable energy projects within 16 km (10 miles) of the project footprint
    - b. Evaluate the cumulative effects of all new or existing utility structures within 16 km (10 miles) of the project footprint
    - c. Evaluate the cumulative impacts of all other human disturbances within 16 km (10 miles) of the project footprint (e.g., urbanization, agriculture, offroad recreation areas, other recreation areas)
    - d. For eagle cumulative effects, we recommend the analysis should include the area within 69 km (43 miles) of the project site for bald eagles and 225 km (140 miles) for golden eagles (USFWS *in prep*)

E. Reporting – After all appropriate pre-siting survey work is completed; the resulting information and risk assessment should be provided to all appropriate agencies for review and discussion.

# Project Design Conservation Measures

Based on the information gathered in the pre-siting data collection and risk assessment phase, the project design should be tailored so that wildlife mortality risks are avoided and minimized. The primary question to be asked during project design is what design features and/or considerations can potentially reduce the hazard of wind turbines to wildlife populations? Consideration for the following aspects is strongly recommended:

- A. Project siting After all pre-siting survey data have been collected and analyzed, it is important to select the site that will have the least impacts to bird and bat populations. The ultimate goal is to avoid any take of migratory birds and bats and/or minimize the loss, destruction, or degradation of migratory bird or bat habitat by placing projects in disturbed and degraded areas to the maximum extent practicable. Siting conservation measures should include both the macro- and micro-site scales.
  - 1. <u>Macro-siting</u> Consideration should be made to avoid:
    - a. Locations with federally or state listed, or otherwise designated sensitive species, and areas managed for the conservation of listed species (i.e., ACECs)
    - b. Areas frequently used for daily bird and bat movements (i.e., areas between roosting and feeding sites)
    - c. Breeding and wintering eagle use areas
    - d. Known migration flyways for birds and bats
    - e. Areas near known bat hibernacula, breeding, and maternity/nursery colonies
    - f. Areas with high incidence of fog, mist, low cloud ceilings, and low visibility, or where other risk factors may come into play
    - g. Fragmentation of large, contiguous tracts of wildlife habitat (see ES/CWS 2006a and 2006b)
  - 2. <u>Micro-siting</u> Once a footprint has been selected, there may be opportunities for finer scale micro-siting of the project components. Component siting considerations include:
    - a. Avoid placing turbines near landscape features that attract raptors
    - b. Avoid placing turbines near landscape features that attract migrant birds (e.g., water sources, riparian vegetation)
    - c. Set turbines back at least 200 meters (~650 feet) from cliff tops where raptors nest (Richardson and Miller 1997)
    - d. Minimize the potential for creating habitats suitable for rodents such as rock piles and eroded turbine pads with openings underneath that will additionally attract raptors, especially golden eagles
- B. Buffer zones It might be appropriate and necessary to establish biologically meaningful buffer zones to protect raptor and other bird nests, areas of high bird and bat use, and known bat roosts. These buffers should be established up-front and be part of the siting process. The Service recommends that the following avoidance buffers are considered:

- 1. <u>Passerines</u> Avoid disturbance activities (e.g., construction actions, noise) within established buffers for active nests of any protected bird species or any high quality nesting habitat (e.g., riparian areas). Buffer distances should consider species, terrain, habitat type, and activity level as these features relate to the bird alert distance and bird flight initiation distance (Whitfield et al. 2008). Buffer size should be coordinated with the Service biologists prior to activities.
- 2. <u>Raptors (including eagles)</u> Avoid siting wind turbines, minimize human access, and avoid disturbance activities (e.g., construction actions, noise) within 1.6 km (1 mile) of an active raptor/eagle nest, unless specific features (e.g., terrain, barriers) dictate reduced buffers (Richardson and Miller 1997). Reduced buffers should be coordinated with the Service.
- 3. <u>"Prairie" and Sage Grouse</u> Avoid construction of wind facilities within 8 km (5 miles) of all grouse lekking sites (Manville 2004)
- C. Appropriate facility design There are many conservation measures that can be incorporated into the facility design that might reduce the potential effects of a project on bird populations. Some include:
  - 1. Use tubular supports with pointed nacelle tops rather than lattice supports to minimize bird perching and nesting opportunities.
  - 2. Avoid placing external ladders and platforms on tubular towers to minimize perching and nesting.
  - 3. Consider using fewer larger turbines compared to a larger number of smaller turbines.
  - 4. Avoid the use of guy wires for all meteorological towers and do not light them unless the Federal Aviation Administration (FAA) requires them to be lit, which is generally >60 meters (>199 ft) AGL in height. Any necessary guy wires should be marked with recommended bird deterrent devices (APLIC 1994, USFWS 2000)
  - 5. If taller turbines (top of rotor swept area is >60 meters [>199 ft] AGL) require lights for aviation safety, the minimum amount of pilot warning and obstruction avoidance lighting specified by the FAA should be used (FAA 2007), approximately 1 in every 5 turbines should be lit, and all lights within the facility should illuminate synchronously. Lighting of the boundary of the facility is most important as an aviation safety warning. Unless otherwise requested by the FAA, use only the minimum number of strobed, strobe-like or blinking red incandescent lights, with minimum intensity, duel strobe lights preferred per lit nacelle. No steady burning lights should be used on turbines or facility infrastructures.
  - 6. Facility lights should be focused downward to reduce skyward illumination. Lights should be equipped with motion detectors to reduce continuous illumination.
  - 7. Where feasible, place electric power lines underground or on the surface as insulated, shielded wire to avoid electrocution of birds. Use recommendations of APLIC (1994, 2006) for any required above-ground lines, transformers, or conductors. When transmission lines must be above-ground, avoid placing lines within wetlands and over canyons.
  - 8. The creation of roads leads to further loss and fragmentation of migratory bird habitat. The Service recommends that the number of roads be minimized for all phases of a project.

D. Appropriate turbine layout – A well thought out turbine layout can substantially reduce the potential for bird strikes. Some examples of better turbine layouts include grouping turbines versus spreading them widely across the project area and orienting rows of turbines parallel to known bird movements. In addition, placing large, turbine sized pylons at the end of turbine rows and in ridge dips can re-direct birds and bats away from the danger areas.

#### Construction Phase Conservation Measures

During the construction of energy facilities, standard construction conservation measures should be established. Conservation measures (CMs) that specifically relate to bird conservation include (but are not limited to):

- A. Minimize area disturbed to extent practicable, including access road construction In an effort to minimize the amount of habitat disturbance and fragmentation, construction plans should emphasize the minimization and placement of habitat disturbance whenever possible, and where possible, avoid construction during the breeding, nesting, and maternity-colony seasons. Construction roads that are not required for long-term operation and maintenance of the facility should be closed and restored to the preconstruction habitat type present.
- B. Vegetation clearing Over 1,000 bird species and their eggs and nests are protected from take by the MBTA. Thus, the Service recommends that all vegetation within the project footprint that will be disturbed be cleared outside of the bird breeding season to the maximum extent practicable (Note: the bird breeding season will vary from location to location, by habitat type, and by species, please consult the Service for breeding seasons in the specific project area). If the proposed project includes potential for take of migratory birds and/or the loss or degradation of migratory bird habitat and vegetation removal cannot occur outside the bird breeding season, project proponents should provide the Service an explanation for why work must occur during the bird breeding season. Further, in these cases, project proponents should demonstrate that all reasonable and practicable efforts to complete work outside the bird breeding season were attempted, and that reason for work to be completed during the breeding season were beyond the proponent's control.
  - 1. When vegetation removal cannot take place outside of the breeding season and a reasonable explanation was provided to the Service, the Service recommends having a qualified, on-site biologist during construction activities to locate active nests, establish avoidance buffers around active nests, watch for new nesting activity, and if necessary stop construction when noise and general activity threaten to disturb an active nest. All active nests of protected birds (e.g., MBTA, ESA, state regulations) should not be disturbed until after nest outcome is complete.
- C. Minimize wildfire potential Wildfire is a potential threat that could impact bird and bat habitat. The Service recommends that construction activities are conducted in a manner that avoids and/or minimizes the ignition of a wildfire.

- D. Minimize activities that attract prey and predators During construction, garbage should be removed promptly and properly to avoid creating attractive nuisances for birds and bats.
- E. Control of non-native plants The introduction of non-native, invasive plant species can impact bird habitat quality. The Service recommends that all appropriate control measures be implemented to prevent the introduction and spread of invasive plant species with and surrounding the project area. Use only plants native to the area for seeding or planting during habitat revegetation or restoration efforts.

#### Operational Phase Conservation Measures

Once a facility is built, appropriate CMs should be in place to reduce the attractiveness of the facility to breeding, migrating, and wintering birds and bats to ensure mortality is minimized. The following Operational CMs should be considered:

- A. Do not create or maintain attraction features for birds/bats Through appropriate habitat maintenance, facilities should seek to reduce features that attract birds and bats to the facility. Simple measures could include removal of carrion that attracts raptors and other scavengers to the site, maintain vegetation heights around turbines to reduce raptor foraging (habitat maintenance to reduce prey availability), and minimizing water sources (especially in desert habitats) that birds and other wildlife seek, and avoid creating situations where rodent prey bases will increase (i.e., through creating new habitats for them, disturbance, and cattle grazing) thus drawing in raptors. These measures should be implemented only after completely evaluating each specific project site and implementation of these measures will not have deleterious effects on other special status wildlife species.
- B. Reduce "Motion Smear" When an object moves across the retina with increasing speed, it becomes progressively blurred, termed "motion smear" (Hodos 2003). This blurring of turbines blades lessen a bird's ability to detect and avoid rotating turbine blades. Using blades with staggered stripes or incorporating a black blade with two white blades could reduce motion smear and thus potential bird turbine collisions (Hodos 2003), although this needs more research.
- C. Turbine feathering and cut-in speed Data suggest that most bird fatalities at wind projects occurred at times of low wind speed (typically <6m/sec), conditions under which rotor blades are moving, but the amount of electricity generated is minimal (Kunz et al. 2007). Turbine feathering, electronically pitching the blades parallel to the wind, could significantly reduce bird impacts by making the blades stationary at low wind speeds (Kunz et al. 2007, Manville 2009). In addition, changing the blade cut-in speed and reducing operation hours in periods of low wind (e.g., from cut-in at 3.0mps to 5.0mps) has been shown to reduce bat mortality by up to 92% with minimal power loss (Arnett et al. 2009). The Service recommends setting a maximum rpm rate for each nameplate turbine that allows for sufficient energy production but reduces the potential for avian and bat collisions. In addition, the Service recommends reducing operation hours during periods of low wind.

- D. Lock rotors during daytime and at night during peak migration periods and peak presence In areas with high concentrations of migrating raptors, passerines, and bats, and high concentrations of overwintering raptors, it may be appropriate to turn the turbines off during peak migration periods or peak use of an area (Manville 2009).
- E. Follow APLIC guidelines for overhead utilities If overhead transmission lines are necessary, facilities should follow all APLIC (1994 and 2006) guidelines.
- F. Minimize lighting Research indicates that lights can both attract and confuse migrating birds (Gehring et al. 2009, Manville 2005, 2009) and bats are known to feed on concentrations of insects at lights (Fenton 1997). The goal of every facility should be to minimize operational lighting to the maximum extent practicable.
  - 1. To avoid disorienting or attracting birds and bats, FAA visibility lighting of wind turbines should employ only strobed, strobe-like or blinking incandescent lights, preferably with all lights illuminating simultaneously. Minimum intensity, maximum "off-phased" duel strobes are preferred by the Service. No steady burning lights (e.g., L-810s) should be used. See also Project Design recommendations for additional lighting guidance.
  - 2. Keep lighting at both operation and maintenance facilities and substations located within ½ mile of the turbines to the minimum level for safety and security needs by using motion or infrared light sensors and switches to keep lights off when not required, shielding operational lights downward to minimize skyward illumination, and do not use high intensity, steady burning, bright lights such as sodium vapor or spotlights.
- G. Decommission Non-operational Turbines All turbines that are non-operational should be decommissioned to reduce collision threats and ideally the blades removed immediately.

#### Post-construction Monitoring

An essential element to understanding the actual impacts of each wind energy facility is post-construction monitoring. The goal of the post-construction monitoring program is to validate the pre-construction risk assessment and allow the facility to implement adjustments based on identified problems and triggers (see Adaptive management section above). Every post-construction monitoring program should be comprised of 1) clear monitoring objectives, 2) a sound monitoring design including an appropriate duration and intensity of study, 3) nest management protocols, 4) a risk assessment validation, and 5) reporting.

- A. Monitoring Objectives (should include but are not limited too)
  - 1. Estimate bird/bat fatality rate due to all aspects of facility operation
  - 2. Assess changes in bird/bat behavior due to all aspects of facility operation
  - 3. Assess changes in population status within and adjacent to the project footprint
  - 4. Assess displacement and avoidance of birds/bats from within the project footprint
  - 5. Determine whether avoidance and minimization measures implemented for the project were adequate to reduce mortality

- B. Monitoring Design The degree and intensity of a monitoring program is determined by a combination of factors including size of the facility, presence of special status species as determined by pre-construction data, and perceived/known risks at the site, as well as additional permit conditions. Similar to pre-siting surveys, the design of post-construction monitoring programs is critical to generate meaningful results. Using BACI study designs pre- and post-construction data, where possible, will be comparable and achieve monitoring objectives. Coordinate with wildlife agencies when designing any monitoring programs. Important aspects of a post-construction monitoring plan include:
  - 1. <u>Duration and Timing</u> Post-construction monitoring programs should be done for a minimum of three years after operation of the facility begins (see Pagel et al. 2010 for duration of eagle monitoring). Where risk is determined to be high, at least five years of assessment and monitoring is recommended (Stewart et al. 2007). This time period ensures data capture differences in parameters due to seasonal and annual variability. Monitoring programs should be extended, as appropriate, if mortality level triggers are reached or the project results in the mortality of a listed species or eagle. It is important to ensure that monitoring includes data collection during breeding, wintering, and migration periods as bird/bat use of areas will vary across season.
  - 2. <u>Study Components</u> All studies should be based on the objectives of the monitoring program and should follow accepted scavenger and search efficiency studies (e.g., Erickson et al. 2003).
    - a. Mortality Studies should cover both turbine collisions and mortalities associated with other aspects of the facility (e.g., electrocutions, transmission line collisions, displacement, wind wake and blade-tip vortices)
      - i. The Service recommends that mortality surveys be completed on a weekly basis for at least one year post monitoring. The survey frequency could be adjusted, if appropriate, depending on the results of the detectability and scavenger studies
    - b. Assessment of search efficiency (observer bias studies)
    - c. Assessment of carcass scavenger rates
    - d. Ensure monitoring plan is representative of the entire footprint
  - 3. <u>Eagle Monitoring Plan</u> In addition to project-specific mortality monitoring studies, the Service recommends developing an eagle monitoring plan separately to ensure that bald and golden eagle mortality is adequately assessed (2007 National Bald Eagle Management Guidelines).
- C. Nest Management Each facility should have protocols in place on how to manage nests established on any part of the facility (see APLIC 2006). Eagle nests should be covered separately according to the new rules and included in the Eagle Monitoring Plan (see above).
- D. Risk Assessment Validation Using pre-and post-construction data, the proponent should validate the identified risks of the project. The validation process should consider:

- 1. Whether the documented mortality rate is higher, lower, or expected as determined in the pre-construction risk assessment
- 2. Are CMs adequate to meet expected levels of mortality?
- 3. Would additional CMs reduce mortality rates?
- 4. Do documented mortality rates trigger additional management or mitigation actions?
- E. Reporting All post-construction monitoring results and risk assessment validation should be reviewed by the appropriate agencies annually. Additional reporting may be a condition of permits issued. Confidentiality should be maintained between the proponent and the agency (ies) reviewing the project reports. For Service reviews, to the extent allowable under FOIA, project-specific information would remain confidential between the Service and the proponent and be protected from release to the public.

#### V. Literature Cited

- Avian Power Line Interaction Committee. 1994. Suggested practices for avoiding avian collisions on power lines: state of the art in 1994. Edison Electric Institute and APLIC, Washington, DC.
- Avian Power Line Interaction Committee. 2006. Suggested practices for avian protection on power lines, the state of the art in 2006. Edison Electric Institute, Avian Power Line Interaction Committee, and California Energy Commission. Washington, D.C. and Sacramento, California.
- Arnett, E. B., M. Schirmacher, M. M. P. Huso, and J. P. Hayes. 2009. Effectiveness of changing wind turbine cut-in speed to reduce bat fatalities at wind facilities. An annual report submitted to the Bats and Wind Energy Cooperative. Bat Conservation International. Austin, Texas, USA.
- Arnett, E.B., D.B. Inkley, D.H. Johnson, R.P. Larkin, S. Manes, A.M. Manville, R. Mason, M. Morrison, M.D. Strickland, and R. Thresher. 2007. Impacts of wind Energy facilities on wildlife and wildlife habitat. The Wildlife Society Technical Report 07-2, Bethesda, Maryland.
- California Energy Commission and California Department of Fish and Game. 2007. California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development Commission Final Report. California energy Commission, Renewable Committee, and Energy Facilities Siting Division, and California Department of Fish and Game, Resources Management and Policy Division. CEC 700-2007-008-CMF.
- Dunford, R.W., T.C. Ginn, and W.H. Desvousges. 2004. The use of habitat equivalency analysis in natural resource damage assessments. Ecological Economics 48(2004):49–70.
- Erickson, W., J. Jeffery, K. Kronner, and K. Bay. 2004. Stateline Wind Project wildlife monitoring annual report, results from the period July 2001-December 2003. Technical Report Submitted to FPL Energy, the Oregon Office of Energy, and the Stateline Technical Advisory Committee.
- Environment Canada's Canadian Wildlife Service. 2006a. Wind turbines and birds, a guidance document for environmental assessment. March version 6. EC/CWS, Gatineau, Quebec. 50 pp.
- Environment Canada's Canadian Wildlife Service. 2006b. Recommended protocols for monitoring impacts of wind turbines and birds. July 28 final document. EC/CWS, Gatineau, Quebec. 33 pp.
- Federal Aviation Administration. 2007. Obstruction marking and lighting. Advisory Circular AC-70/7460.
- Fenton, M.B. 1997. Science and the conservation of bats. Journal of Mammalogy 78:1-14.
- Gehring, J.L., P. Kerlinger, and A.M. Manville, II. 2009. Communication towers, lights and birds: successful methods of reducing the frequency of avian collisions. Ecological Applications 19: 505-514.
- Hodos, W. 2003. Minimization of motion smear: reducing avian collisions with wind turbines. National Renewable Energy Laboratory Report No. NREL/SR-500-33249, Golden, Colorado, USA.
- Kunz, T.H., E.B. Arnett, B.M. Cooper, W.P. Erickson, R.P. Larkin, T. Mabee, M.L. Morrison, M.D. Strickland, and J.M. Szewczak. 2007. Assessing impacts of wind-energy development on nocturnally active birds and bats: a guidance document. Journal Wildlife Management 71:2249-2486.

- Kuvlesky, W.P., Jr., L.A. Brennan, M.L. Morrison, K.K. Boydston, B.M. Ballard, and F.C. Bryant. 2007. Wind energy development and wildlife conservation: challenges and opportunities. Journal Wildlife Management 71:2487-2498.
- Manville, A.M., II. 2004. Prairie grouse leks and wind turbines: U.S. Fish and Wildlife Service justification for a 5-mile buffer for leks; additional grassland songbird recommendations. Division of Migratory Bird Management, USFWS, Arlington, VA. Peer-reviewed white paper.
- Manville, A.M., II. 2005. Bird strikes and electrocutions at power lines, communication towers, and wind turbines: state of the art and state of the science next steps toward mitigation, pp.1051-1064. *In* C.J. Ralph and T. D. Rich, [eds.], Bird Conservation Implementation in the Americas: Proceedings 3<sup>rd</sup> International Partners in Flight Conference 2002. USDA Forest Service General Technical Report PSW-GTR-191, Pacific Southwest Research Station, Albany, California.
- Manville, A.M., II. 2009. Towers, turbines, power lines, and buildings steps being taken by the U.S. Fish and Wildlife Service to avoid or minimize take of migratory birds at these structures. Pp 262-272. In T.D. Rich, C. Arizmondi, D. Demarest, and C. Thompson [eds.], Tundra to Tropics: Connecting Habitats and People. Proceedings 4<sup>th</sup> International Partners in Flight Conference, 13-16 February 2008, McAllen, TX. Partners in Flight.
- National Oceanic and Atmospheric Administration. 2006. Habitat equivalency analysis: an overview. Available online at www.darrp.noaa.gov/library/pdf/heaoverv.pdf
- National Oceanic and Atmospheric Administration. 2009. Restoration economics, habitat equivalency analysis. Available online at http://www.csc.noaa.gov/coastal/economics/habitatequ.htm.
- Ontario Ministry of Natural Resources. 2006. Wind Power and Bats: Bat Ecology Background Information and Literature Review of Impacts. December 2006. Fish and Wildlife Branch. Wildlife Section. Lands and Waters Branch. Renewable Energy Section. Peterborough, Ontario. 61 p.
- Pagel, J.E., D.M. Whittington, and G.T. Allen. 2010. Interim golden eagle inventory and monitoring protocols; and other recommendations. Division of Migratory Birds, Arlington, VA
- Richardson, C.T. and C.K. Miller. 1997. Recommendations for protecting raptors from human disturbance: a review. Wildlife Society Bulletin 25(3):634-638.
- Stewart, G.B., A.S. Pullin, and C.F. Coles. 2007. Poor evidence-base for assessment of windfarm impacts on birds. Environmental Conservation 34:1-11.
- USFWS. 2000. Interim Guidelines for Recommendations on Communications Tower Siting, Construction, Operation, and Decommissioning. Division of Migratory Birds, Arlington, VA.
- USFWS. 2003. Interim guidance on avoiding and minimizing wildlife impacts from wind turbines. Division of Migratory Birds, Arlington, VA.
- USFWS. 2008. Birds of Conservation Concern. Division of Migratory Birds, Arlington, VA.
- USFWS. *In Prep*. Implementation guidance for eagle take permits under 50 CFR 22.26 and 50 CFR 22.27. Division of Migratory Birds, Arlington, VA.
- Williams, B. K., R. C. Szaro, and C. D. Shapiro. 2009. Adaptive Management: The U.S. Department of the Interior Technical Guide. Adaptive Management Working Group, U.S. Department of the Interior, Washington, DC.

# Appendix 1. Key Resources for Avian and Bat Protection Plan Development

#### Adaptive Management

Williams, B. K., R. C. Szaro, and C. D. Shapiro. 2009. Adaptive Management: The U.S. Department of the Interior Technical Guide. Adaptive Management Working Group, U.S. Department of the Interior, Washington, DC. <a href="http://www.doi.gov/initiatives/AdaptiveManagement/TechGuide.pdf">http://www.doi.gov/initiatives/AdaptiveManagement/TechGuide.pdf</a>

#### Avian and Bat Protection Plan Guidelines

- Avian Power Line Interaction Committee and U.S. Fish and Wildlife Service. 2005.
   Avian protection plan (APP) guidelines.
   <a href="http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/APP/AVIAN%20PROTECTION%20PLAN%20FINAL%204%2019%2005.pdf">http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/APP/AVIAN%20PROTECTION%20PLAN%20FINAL%204%2019%2005.pdf</a>
- Avian Power Line Interaction Committee. 2006. Suggested practices for avian protection on power lines, the state of the art in 2006. <a href="http://www.aplic.org/">http://www.aplic.org/</a>
- Avian Power Line Interaction Committee. 1994. Suggested practices for avoiding avian collisions on power lines: state of the art in 1994. Edison Electric Institute and APLIC, Washington, DC.

# Birds of Conservation Concern

 U.S. Fish and Wildlife Service, Division of Migratory Birds. 2008. Birds of Conservation Concern. Arlington, VA.
 http://library.fws.gov/Bird\_Publications/BCC2008.pdf

#### Eagle Rule and Guidance

- For a general overview of the new eagle permits final rule, review the Service's *Migratory Bird Management Information: Eagle Rule Questions and Answers*; located at <a href="http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BaldEagle/QAs%20for%20Eagle%20Rule.final.10.6.09.pdf">http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BaldEagle/QAs%20for%20Eagle%20Rule.final.10.6.09.pdf</a>
- Review the Service's 2009 Final Environmental Assessment, Proposal to Permit Take as Provided Under the Bald and Golden Eagle Protection Act; located at <a href="http://www.fws.gov/migratorybirds/CurrentBirdIssues/BaldEagle/FEA\_EagleTakePermitFinal.pdf">http://www.fws.gov/migratorybirds/CurrentBirdIssues/BaldEagle/FEA\_EagleTakePermitFinal.pdf</a>
- Review the Service's 2009 Eagle Permits; Take Necessary to Protect Interests in Particular Localities; Final Rules; located at <a href="http://www.fws.gov/migratorybirds/CurrentBirdIssues/BaldEagle/Final%20Disturbance%2">http://www.fws.gov/migratorybirds/CurrentBirdIssues/BaldEagle/Final%20Disturbance%2 0Rule%209%20Sept%202009.pdf</a>
- Minimize impacts to bald eagles by implementing recommendations provided in the Service's 2007 *National Bald Eagle Management Guidelines*; located at <a href="http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BaldEagle/NationalBaldEagleManagementGuidelines.pdf">http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BaldEagle/NationalBaldEagleManagementGuidelines.pdf</a>
- Pagel, J.E., D.M. Whittington, and G.T. Allen. 2010. Interim golden eagle inventory and monitoring protocols; and other recommendations. Division of Migratory Birds, Arlington, VA

## Habitat Equivalency Analysis

- National Oceanic and Atmospheric Administration. 2006. Habitat equivalency analysis: an overview.
  - http://www.darrp.noaa.gov/library/pdf/heaoverv.pdf
- National Oceanic and Atmospheric Administration. 2009. Restoration economics, habitat equivalency analysis.
  - http://www.csc.noaa.gov/coastal/economics/habitatequ.htm

# Bird and Bat Monitoring Methods

- California Bat Working Group. 2006. Guidelines for assessing and minimizing impacts to bats at wind energy development sites in California.
  - http://www.wbwg.org/conservation/papers/CBWGwindenergyguidelines.pdf
- Kunz, T.H., E.B. Arnett, B.M. Cooper, W.P. Erickson, R.P. Larkin, T. Mabee, M.L. Morrison, M.D. Strickland, and J.M. Szewczak. 2007. Assessing impacts of wind-energy development on nocturnally active birds and bats: a guidance document. Journal Wildlife Management 71:2249-2486.
- Ontario Ministry of Natural Resources. 2006. Wind Power and Bats: Bat Ecology
  Background Information and Literature Review of Impacts. December 2006. Fish and
  Wildlife Branch. Wildlife Section. Lands and Waters Branch. Renewable Energy Section.
  Peterborough, Ontario. 61 p.

#### Wind Project Development Guidance

California Energy Commission and California Department of Fish and Game. 2007. California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development Commission Final Report.

- http://www.energy.ca.gov/windguidelines/index.html
- Environment Canada's Canadian Wildlife Service. 2006. Wind turbines and birds, a guidance document for environmental assessment. March version 6. EC/CWS, Gatineau, Quebec. 50 pp.
  - http://www.bape.gouv.qc.ca/sections/mandats/eole\_matane/documents/DB15.pdf
- Environment Canada's Canadian Wildlife Service. 2006. Recommended protocols for monitoring impacts of wind turbines and birds. July 28 final document. EC/CWS, Gatineau, Quebec. 33 pp.
  - http://www.canwea.ca/images/uploads/File/Resources/Government/Wind\_Turbines\_and\_B irds Monitoring Protocols FINAL.PDF
- National Wind Coordinating Collaborative. 2007. Mitigation Toolbox. http://www.nationalwind.org/assets/publications/Mitigation\_Toolbox.pdf
- USFWS. 2000. Interim Guidelines for Recommendations on Communications Tower Siting, Construction, Operation, and Decommissioning http://www.fws.gov/habitatconservation/com\_tow\_guidelines.pdf

• USFWS. 2003. Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines.

http://www.fws.gov/habitatconservation/wind.html

# Alexandra Kostalas

From: Allen, Debbie [Debbie\_Allen@nps.gov]
Sent: Wednesday, August 17, 2011 2:21 PM

To: BLM\_CA\_TerraGen\_Alta\_East

Cc: Schmierer, Alan C.; WASO EQD ExtRev; Port, Patricia; Pendurthi, Susmita

Subject: Fw: DEC-11/0140:Alta East Wind Project - Possible Land Use Plan Amendment (CACA

52537)

PWR has no comment regarding subject document.

Debbie Allen National Park Service Partnerships Programs, PWR 1111 Jackson Street #700 Oakland, CA 94607 510/817-1446 510/817-1505 Fax

"Don't dwell on what went wrong. Instead, focus on what to do next. Spend your energies on moving forward toward finding the answer." -- Denis Waitley
----- Forwarded by Debbie Allen/OAKLAND/NPS on 08/17/2011 02:19 PM -----

Dale\_Morlock@nps.

gov

To

07/26/2011 08:16

Debbie\_Allen@nps.gov

AΜ

СС

Subject

DEC-11/0140:Alta East Wind Project
- Possible Land Use Plan Amendment

(CACA 52537)

NPS External Affairs Program: ER2000 Program Email Instruction Sheet
United States Department of the Interior
National Park Service Environmental Quality Division
7333 W. Jefferson Avenue
Lakewood, CO 80235-2017

# EIS/Related Document Review: Detail Viewhttp://er2000/detail.cfm?ernum=15962 -

Document Information -

Record #15962

ER Document Number

DEC-11/0140

Document Title

Alta East Wind Project - Possible Land Use Plan Amendment

(CACA 52537)

Location

State

County

California

Kern County

Document Type

Notice of Intent, Prepare Environmental Impact Statement,

Land Use Plan Amendment

Doc. Classification

Energy Project

Applicant

Bureau of Land Management

Web Review Address

http://www.gpo.gov/fdsys/pkg/FR-2011-07-15/html/2011-17717.htm

http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy/pods0.Par.23308.File.dat/AltaEast\_POD\_2-15-11.pdf

http://www.blm.gov/ca/st/en/fo/ridgecrest/alta east wind project.html

http://www.blm.gov/ca/st/en/prog/energy/fasttrack/Alta\_East/fedstatus.
html

http://www.blm.gov/ca/st/en/fo/ridgecrest.html

Document Reviewers

WASO Lead Reviewer

Thomas Flanagan(2310), Nancy Brian(2340), Kerry Moss(2360), David Vana-Miller(2380), Patricia F Brewer(2350), Bill Commins(2200), Paul Wharry(2033), Dale Morlock(2310), Patrick Walsh(2310), Fred Sturniolo(2420), Tokey Boswell(2510)

Regional Lead Reviewer

Alan Schmierer (PWR-O)

Regional Reviewers

Alan Schmierer(PWR-O), Martha Crusius(PWR-O), Debbie Allen(PWR-O)

Cultural Lead Reviewer

Daniel Odess

Cultural Reviewers

Daniel Odess

Action -

Lead Bureau

Bureau of Land Management

Response Type

Regional Response

Instructions

Comments to Lead DOI Bureau. NPS Lead consolidates NPS comments, prepares comment/no comment memo, and emails to Lead DOI Bureau with copy to EQD (WASO-2310). See DI Remarks Section below for specifics.

#### Topic Context

The Bureau of Land Management (BLM) Ridgecrest Field Office, Ridgecrest, California, together with the County of Kern, California, intend to prepare a joint Environmental Impact Statement (EIS)/Environmental Impact Report (EIR), which may include an amendment to the California Desert Conservation Area (CDCA) Plan (1980 as amended), related to Alta Windpower Development LLC's (Applicant or AWD) right-of-way (ROW) authorization request for the Alta East Wind Project (Project), a 300-megawatt (MW) wind farm.

BLM is also segregating, subject to valid existing rights, approximately 2,083 acres of public lands from appropriation under the public land laws, including the Mining Law of 1872, as amended, but not from leasing under the mineral leasing laws or disposal under the mineral material laws, for a period of 2 years from the date of

publication of this notice for the purpose of processing AWD's ROW authorization request.

AWD has requested a ROW authorization to construct, operate, maintain, and decommission the 300-MW Alta East Project.

The Project is proposed to be located on approximately 3,200 acres on the north and south sides of State Route 58 in southeastern Kern County, California.

The proposed Project area is approximately 3 miles northwest of the Town of Mojave and approximately 11 miles east of the City of Tehachapi.

The project would include wind turbines, access roads, and energy collection lines on 3,200 acres, of which 2,083 acres are on public land under the jurisdiction of the BLM and 1,117 acres of private land under the jurisdiction of Kern County.

#### DI Remarks

Reviewers: Please Email comments to NPS Lead Alan Schmierer (PWR-O), Alan\_Schmierer@nps.gov by August 3, 2011.

NPS Lead: Alan Schmierer please consolidate NPS comments (no comment) in memo format and send directly to BLM, Moreno Valley, CA, altaeast@blm.gov by August 12, 2011, with copy to: waso\_eqd\_extrev@nps.gov, Susmita\_Pendurthi@ios.doi.gov and Patricia Port@doi.gov

Applicant Address for Alan Schmierer: ATTN: Jeffery Childers, Project Manager, BLM California Desert District Office, 22835 Calle San Juan de Los Lagos, Moreno Valley, California 92553-9046.

\* FAX: (951) 697-5299.

BLM CONTACT: Jeffery Childers, California Desert District ffice.

\* Telephone: (951) 697-5308.

\*email: jchilders@blm.gov-

#### altaeast@blm.gov -

Workflow -

Send Comments to Lead Office: PWR-0

Send to: Alan Schmierer (PWR-O) by 08/03/11

Lead DOI Bureau: Bureau of Land Management

DUE TO: Lead Bureau by 08/12/11

DATE DUE OUT: 08/12/11

OEPC Memo to EQD: 07/26/11 Comments Due To Lead WASO Div:

Comments Due Out to

OEPC/Wash or Applicant: 08/12/11

Comments Due To Lead Region: 08/03/11-

Comments Due in EQD: Comments Due to REO: -

Tracking Dates -

Rcvd. Region Comments: -

Comments Sent to OEPC, REO, or Applicant: -

New Instructions: Recvd. Ext. Letter: Reg. Cmts. to Bureau: -

Cmts. Called In: -

Comments Sent to EQD Chief: - Comment Letter/Memo Signed: -

Recvd. Extension: Sent Add. Info: Reg. Cmts. Listed: Rcvd. Bureau Cmts: -

Tracking Notes

Reviewer Notes -

# Documentation

Document Last Modified: 07/26/2011

Complete: False

Date Created: 07/26/2011
Date Last Email Sent: